LOMBARDIC ARCHITECTURE
ITS ORIGIN, DEVELOPMENT AND DERIVATIVES

By G. T. RIVOIRA

UNIVERSITY OF TORONTO
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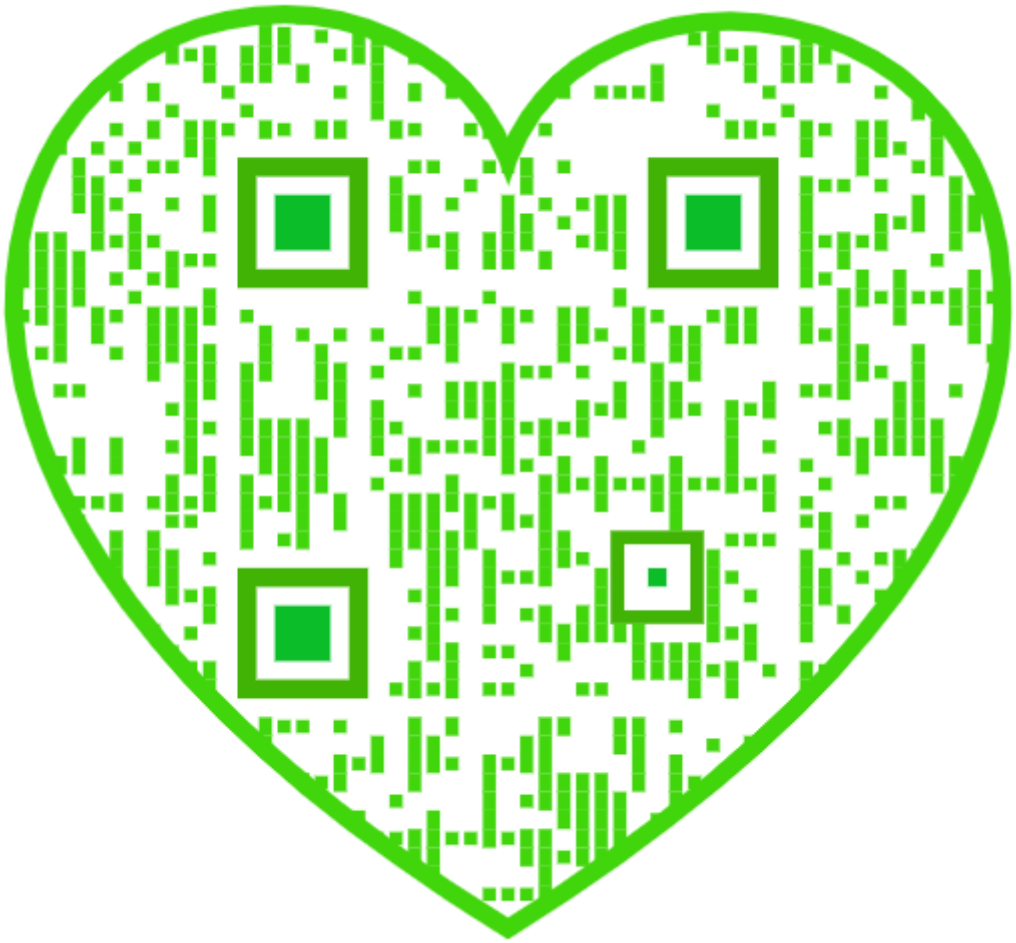

LOMBARDIC ARCHITECTURE

VOL. II

THE ABBEY CHURCH

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GIN, DEVELOPMENT AND TIVES

By G. T. RIVOIRA

TED BY G. McN. RUSHFORTH, M.A.

OVER EIGHT HUNDRED ILLUSTRATIONS

VOL. II

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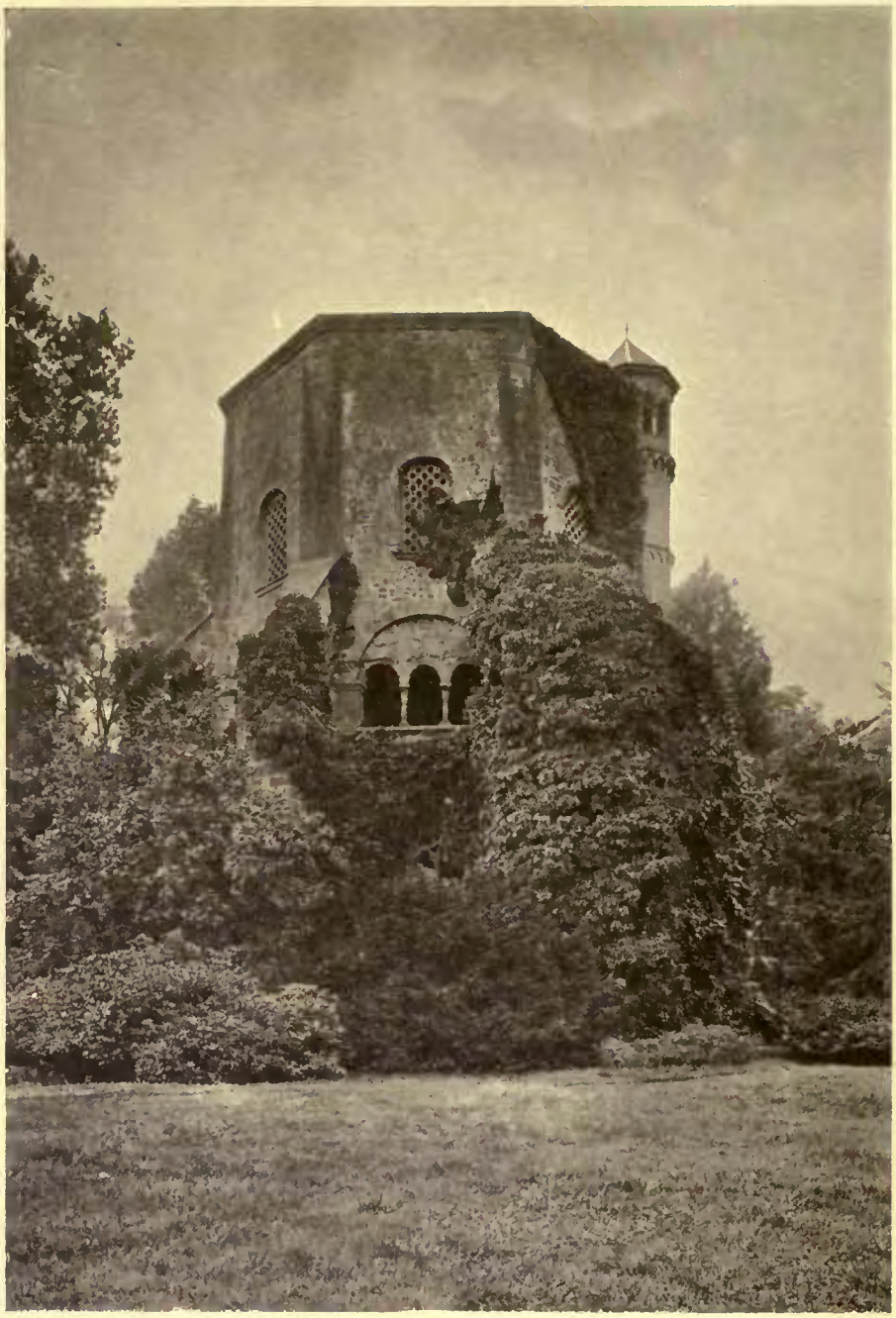

[*Frontispiece*

THE ABBEY CHURCH OF METTLACH.

LOMBARDIC ARCHITECTURE

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By G. T. RIVOIRA

TRANSLATED BY G. McN. RUSHFORTH, M.A.

WITH OVER EIGHT HUNDRED ILLUSTRATIONS

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PART II

INTRODUCTION

HAVING traced the origins of the Lombardic vaulted basilica, I now proceed to reconstruct the history of its principal derivatives in the countries north of the Alps. In doing so I shall confine myself to giving the main outlines, leaving to others the task of indicating the secondary ones. These outlines will be based exclusively on original monuments which have come down to us in a state of complete or partial preservation, or of which we have descriptions or drawings; so that students of mediaeval architecture may have some clue to guide them in the labyrinth where at present they have lost their way.

The views of writers on the origins and development of the great styles of ecclesiastical architecture practised in the Transalpine lands between the epoch of 1000 and the first appearance of the Pointed style show immense divergence. Round these origins and round this development there has grown up such a dense growth of "influences"—Syrian, Roman, Gallo-Roman, Byzantine, Barbarian, Arabic—having their source, when evidence fails, in the imagination, that it is no easy matter to unwind the tangle. And the difficulty has been intensified by the erroneous belief that the East was the chief inspirer and authoritative guide of all the mediaeval Christian systems, from the Romano-Ravennate down to the Pointed style.

To all this must be added:

(1) The imperfect acquaintance with history, philology, construction, statics, art, possessed by most of those who approach the subject of the Middle Ages without understanding them, and, moreover, have neither the knowledge nor the ability to deal with the main question at issue in its entirety, and therefore lose their way in the by-paths of secondary problems.

(2) The unwillingness which some people have to open their eyes to the clear, tangible truth of facts, preferring vague probabilities to simple reality.

(3) The conservative spirit, to which everything that is new is abhorrent.

(4) The confusion generally prevalent with regard to the dates and essentially distinctive characteristics of the buildings belonging to the styles which form the subject of this work.

Hence, it is easy to see how difficult will be the road which I am about to traverse, and how arduous the ascent of that height whose still virgin summit it is my ambition to attain. However, with the aid of a long period of preparation devoted to the acquisition of knowledge which is not to be learned in schools or books, and of twenty years of research and study extending over some thousand buildings scattered over the ancient Roman world, I shall make the effort to reach that summit in the cause of Monumental Archaeology. I am well aware that my work will arouse criticism; but I am supported by a lively confidence that, though in the course of time it may require correction and completion, that work nevertheless marks a sure advance along the road of truth. And truth, sooner or later, will always win the day.

The leading idea of this part of my book is as follows. With the appearance of the Lombardic basilica, a spring-tide of new styles of building burst forth north of the Alps, the chief being the Lombardo-Norman and the Lombardo-Rhenish, as I prefer to call them. I do so because the terms "Romanic" and "Romanesque," applied to this great art of the Middle Ages, do not seem to me to be justified; for we might equally well call the Byzantine style "Romanesque," seeing that the Byzantine vaulted basilica in its supreme expression, St. Sophia at Constantinople, had its origin in the great Baths of Rome, as I have explained.

It was the monks of St. Benedict who acted as the sponsors of these styles; it was under their protection that they were nurtured; it was to the Benedictine services that they were adapted. Brought into conformity with the tendencies and peculiar character of the peoples among whom they were introduced, and even modified to suit their climates, clothed in new forms, and treated with variety of conception, these two styles made remarkable progress, and were diffused far and wide by the agency of the Benedictine monks.

In the course of my argument I shall again have to shatter more than one legend about the real origins of the chief characteristics which go to make up Lombardic architecture; and I shall have to apply the same treatment to other legends concerning the birth and growth of the principal styles which derived from it their life and sustenance.

The illustrations provided to explain and confirm the text will, as before, be, in the main, reproductions of photographs. Mere drawings, in which the artistic element is emphazised at the expense of truth, have in the past lent themselves too readily to illusion; and though they may thereby satisfy the taste of the dilettantes of architecture, they only lead real students astray.

CHAPTER I

THE BEGINNINGS OF THE LOMBARDO-NORMAN STYLE IN BURGUNDY

THE first solid foundations of the Lombardo-Norman style were not laid, to judge by the buildings which have come down to us, in Burgundy, as some think, but in Normandy. Burgundy, however, can claim the credit of having provided the field for the free exercise and consolidation of the forces which later helped to lay those foundations, and of having produced the first flowers of the new style.

The soul of this work of preparation was the Benedictine monk, William of Volpiano (961–1031), born on the island of San Giulio in the Lake of Orta, brought as a youth to Cluny by Majolus abbot of that monastery (948–994), and afterwards appointed abbot of Saint Bénigne at Dijon (990) by Bruno bishop of Langres (981–1016). With regard to this man of great learning, of iron will, a great reformer of the monastic orders, architect and builder of churches and convents, the diffuser of Italian culture in Burgundy and Normandy, we know, among other things, that he took in hand the erection of the new abbey church of St. Benignus at Dijon (1002–1018), and also built the abbey of Fruttuaria in Piedmont founded in 1003 and consecrated in 1006.[1] [2] [3] [4]

Of this preparatory work the famous church at Dijon, in which some of the characteristics of the Lombardic basilica appeared for the first time, was the highest, most solemn expression. Let us turn to it.

THE CHURCH OF SAINT BÉNIGNE AT DIJON, built by St. Gregorius bishop of Langres (507–539) above a crypt which he raised in height,[5] was renewed in 871 by Isaac bishop of the same diocese (859–880). Having fallen into decay, and part of it being in ruins, it was rebuilt by William of Volpiano, the extreme eastern part of the previous structure being preserved. The rebuilding was begun in 1002, and the dedication took place in 1018.

The church, however, was unfortunate. In 1096 the central tower fell, and was rebuilt. Following this operation and the repairs of the damage caused by the catastrophe came a second dedication performed by Pope Paschal II in 1107. In 1136 the whole building suffered considerably from the terrible conflagration which

[1] Mabillon, *Acta Sanct. Ord. S. Benedicti.—Vita s. Guillelmi abbatis Divionensis. Auctore Glabro Rodulfo monacho.*

[2] Id., *Vita s. Guillelmi abbatis. Excerpta ex libro de revelatione, aedificatione, et auctoritate monasterii Fiscamnensis.*

[3] D'Achery, *Spicileguim.—Chronica S. Benigni Divionensis.*

[4] Savio, *op. cit.*

[5] *Mon. Germ. Hist.—Gregorii ep. Turonensis liber in gloria martyrum.*

devastated Dijon, and the restoration necessitated thereby must have been far-reaching inasmuch as it involved a second reconsecration at the hands of Pope Eugenius III in 1146. In 1271 the rebuilt tower over the crossing again collapsed, injuring not only its immediate surroundings but other parts of the church as well.[1] After this disaster the portions that had suffered most were rebuilt in the new or Pointed style, thus satisfying the passion for innovation which followed the appearance of the new architecture. Under these circumstances, all that was left of William's church was the rotunda, with the ancient chapel of St. John Baptist at one end of it, and a considerable part of the termination of the basilica at the other. Finally, in 1792 the pickaxe demolished everything of his church that still remained above ground. The part below ground, with its vaulting broken in, and degraded into a receptacle

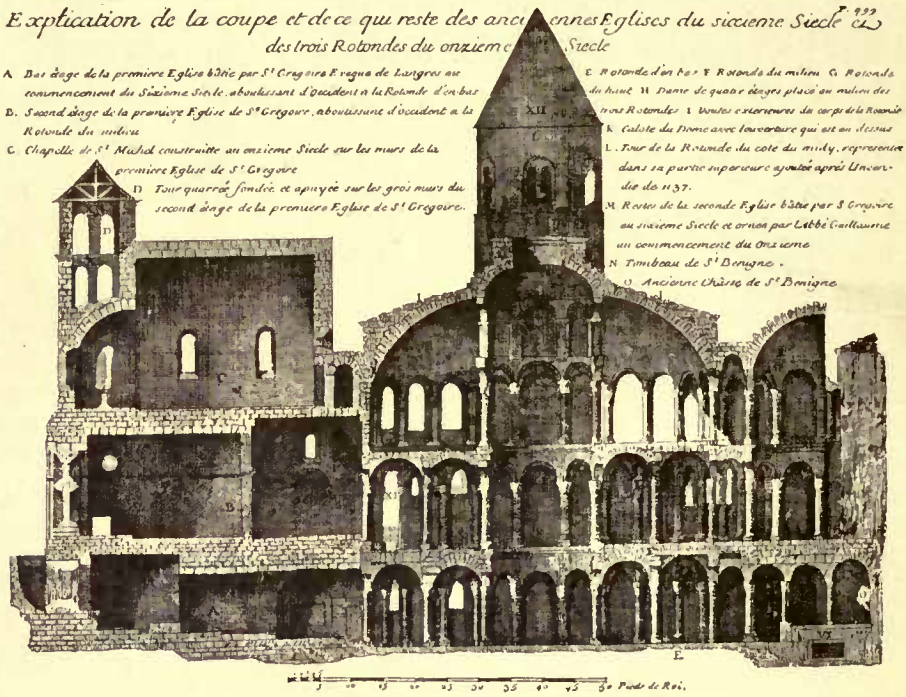

Explication de la coupe et de ce qui reste des anc nnes Eglises du siecleme Siecle
des trois Rotondes du onzieme Siecle
A Bas étage de la premiere Eglise bâtie par S.t Gregoire Evesque de Langres au commencement du Sixieme Siecle, aboutissant d'occident a la Rotonde d'en bas
B. Second étage de la premiere Eglise de S.te Gregoire, aboutissant d'occident a la Rotonde du milieu
C. Chapelle de S.t Michel construitte au onzieme Siecle sur les murs de la premiere Eglise de S.t Gregoire
D Tour quarrée fondée et apuyée sur les gros murs du second étage de la premiere Eglise de S.t Gregoire.
E Rotonde d'en bas F Rotonde du milieu G Rotonde du haut H Dome de quatre étages placé au milieu des trois Rotondes I Voutes exterieures du corps de la Rotonde
K Galerie du Dome avec louverture qui est au dessus
L. Tour de la Rotonde du cote du midy, representée dans sa partie superieure ajoutée après l'Incendie de 1137.
M Reste de la seconde Eglise bâtie par S. Gregoire au sixieme Siecle et ornée par l'abbé Guillaume au commencement du Onzieme
N Tombeau de S.t Benigne.
O Ancienne Chasse de S.t Benigne
Pieds de Roi.

Fig. 367.—Dijon. Saint Bénigne. Section of the eastern end (1002–1018, and VIth and IXth Centuries). (*From Plancher, "Histoire générale et particulière de Bourgogne."*)

for rubbish, has been restored of recent years to the condition which it now presents.

The chronicle of Saint Bénigne[2] contains a description of the interior of the church, though it is not without omissions and inaccuracies. Plancher[3] has furnished interesting particulars about the portions still surviving in the first half of the XVIIIth century, and of these he gives two ground plans, a section of the elevation, and two views of the exterior.

The structure consisted of a basilica, terminated towards the east by a rotunda. Both basilica and rotunda were of three stories, one being underground. The latter or crypt was composed of a circular vaulted structure consisting of two concentric

[1] *Mon. Germ. Hist.—Annales S. Benigni Divionensis.*
[2] D'Achery, *Spicilegium.—Chronica S. Benigni Divionensis.*
[3] *Histoire générale et particulière de Bourgogne.*

circles of columns enclosed by an outer wall with half-columns, lighted by four windows splayed on the inside, and with a chapel at the eastern end used as a chancel. Over the central space rose a kind of open octagonal tower, having three series of arcades one above the other, the two lower supported by columns, the uppermost by piers. It was crowned by a cupola with a circular opening at the top (Fig. 367).

To the west of the rotunda was another structure, shaped like a T (in the underground part), consisting of a nave and a transept or cross nave, both of the same length, and separated in either case from aisles by two rows of columns. The nave and aisles were flanked by closed vestibules forming outer aisles, and terminated in an arcaded apse which contained the tomb and altar of St. Benignus. On the eastern side of either arm of the transept was a rectangular chapel with an apse, and a semicircular recess taken out of the thickness of the wall. This arrangement was based on the lines of the previous church, in the form which it had acquired in the IXth century; a fact which has come to light in the recent restoration.

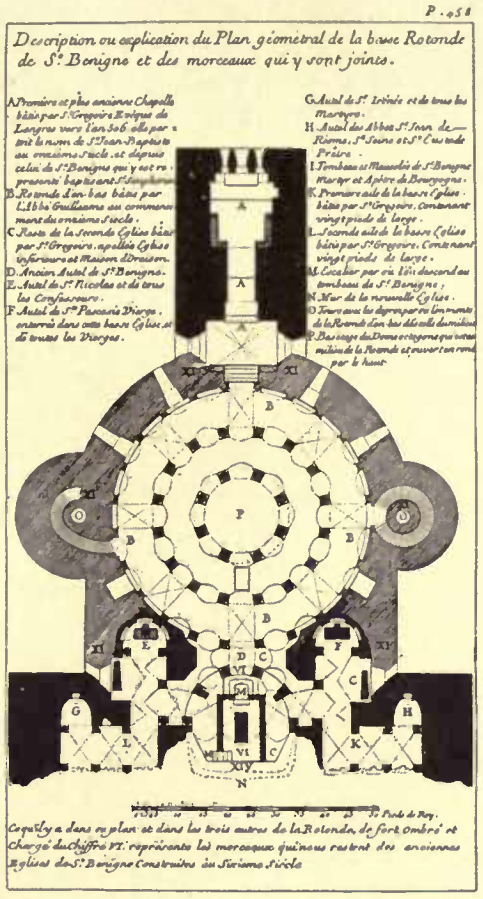

P. 458
Description ou explication du Plan géométral de la basse Rotonde de S.t Benigne et des morceaux qui y sont joints.
A Premiere et plus ancienne Chapelle bâtie par S.t Grégoire Evêque de Langres vers l'an 606 elle passe pour être la mere de S.t Jean Degollé au commencement du onzieme Siecle et depuis celui de S.t Benigne qui y est représenté baptisant S.t Simphorien.
B Rotonde d'en bas bâtie par L'Abbé Guillaume au commencement du onzieme Siecle.
C Reste de la seconde Eglise bâtie par S.t Grégoire, appellée Eglise inferieure et Maison d'Evesque.
D Ancien Autel de S.t Benigne.
E Autel de S.t Nicolas et de tous les Confesseurs.
F Autel de S.te Pascasie Vierge, enterré dans cette basse Eglise et de toutes les Vierges.
G Autel de S.t Irinée et de tous les Martyrs.
H Autel des Abbés S.t Jean de Reome, S.t Jeure et S.t Constable Prieur.
I Tombeau et Mausolée de S.t Benigne Martyr et Apôtre de Bourgogne.
K Premiere aile de la basse Eglise bâtie par S.t Grégoire, contenant vingt pieds de large.
L Seconde aile de la basse Eglise bâtie par S.t Grégoire. Contenant vingt pieds de large.
M Escalier par où l'on descend au tombeau de S.t Benigne.
N Mur de la nouvelle Eglise.
O Tours avec les degrez par où l'on monte de la Rotonde sur les dites ailes derniere.
P Passage du Dome et regorne qui entre milieu de la Rotonde et couvert en rond par le haut.
Toises
Pieds de Roy.
Ce qu'il y a dans ce plan et dans les trois autres de la Rotonde, de fort ombré et chargé du chiffre VI. représente les morceaux qui nous restent des anciennes Eglises de S.t Benigne Construites au Sixieme Siecle

Fig. 368.—Dijon. Saint Bénigne. Underground plan of the eastern end (1002–1018, and VIth and IXth Centuries). (*From Plancher, "Histoire générale et particulière de Bourgogne."*)

In the rotunda (Fig. 369) the isolated shafts are surmounted by Pre-Lombardic cubical capitals, hollowed out at the angles, each of which is filled by a smooth pointed leaf, while the faces are left plain. There are two exceptions in the middle row of columns, with the faces bearing a human figure, sometimes of very curious character, in the act of supporting with its arms a conventional abacus (Fig. 370). The crosses roughly engraved on two of the angle leaves of one of these capitals are a later addition. The figures are worked in rather round relief, and without undercutting. Design and execution alike are barbarous and elementary.

In the outer circle of columns, opposite to the tomb of St. Benignus, are two more capitals carved with animals of rude but robust design, boldly conceived, treated with variety of action (and not a uniform one, like the human figures on the two capitals just described), strongly, and sometimes completely undercut (Figs. 371, 372). These belong to a period considerably later than the rebuilding of the early XIth century. They may probably be connected with the restoration necessitated by the fall of the central tower in 1096, and this is the date to which an

experienced eye would be inclined to assign them. From the capitals spring round arches.

The vaulting, which has been rebuilt on the pattern of the few old portions which survived, is of barrel form over the inner annular aisle, and alternately of

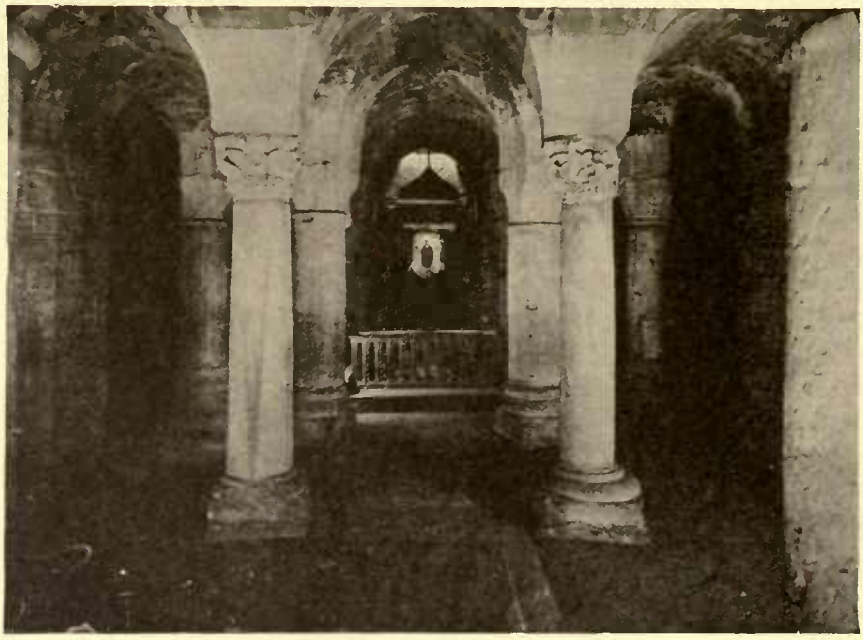


Fig. 369.—Dijon. Saint Bénigne. Crypt of the Rotunda (1002–1018).

barrel and intersecting form over the outer one. The barrel vaults are constructed of radiating oblong blocks of stone, roughly cut. The central space, originally open at the top, is now covered by a cupola.

Fig. 370.—Dijon. Saint Bénigne. Crypt of the Rotunda. Capital (1002–1018).

In the arcaded apse round the tomb of St. Benignus still stand six original columns with Pre-Lombardic cubical capitals hollowed out at the angles, and with plain faces. The southern area of the east end of the basilica, to the side of the saint's tomb, is divided into aisles, the vaulting of which has recently been replaced; and here are seven capitals of the same date as the two carved ones facing the tomb. One of them shows foliage and monsters. Another has grooved leaves. Another has similar foliage and interlacings, with four heads at the angles each holding in its mouth a leaf which takes the place of a volute. These heads are by the same hand that executed those at the angles of one of the capitals about the tomb. A fourth is ornamented with large volutes at the angles, roses, palm leaves, and animals (Fig. 373). The fifth is carved, partly with plain leaves the tips of which are divided and curl over in volutes (*i.e.* crockets), and partly with curiously wrought foliage and interlacing wicker work. The two remaining ones show a double row of stiff plain leaves. Those of the bases which are old

are stepped, and differ in form from those in the rotunda belonging to the time of William of Volpiano. They are clearly of another period.

In the northern arm, only a portion of which survives, two original capitals may be observed, one cubical with the faces left plain, the other the fellow of the two which we pointed out in the central circle of the rotunda.

The presence in this arm and in the arcade round the tomb of St. Benignus, *i.e.* in the most important part of the rotunda, of rudely executed Pre-Lombardic capitals of the type which prevails all through the crypt, is a clear proof that the elaborately worked capitals which we assigned to the end of the XIth century are certainly not of the same date as the crypt itself.

Fig. 371.—Dijon. Saint Bénigne. Crypt of the Rotunda. Capital (1096–1107).

The chapel of St. John Baptist consists of a rectangular chamber, regularly orientated, roughly built of stones with very thick joints. The cross vaulting has been rebuilt. Beyond it is another rectangular chamber, even more rudely constructed, showing a mortar which differs from the other. Here again the barrel vault has been replaced.

The difference between the masonry of the walls of the two chambers, and also of the outer wall of the rotunda, makes it certain that the three structures are not of the same date. And seeing that this adjunct to the termination of Saint Bénigne is mentioned about the year 938, when the dedication to St. Mary took place,[1] we must ascribe it, for the present, to the restoration of the church in 871. Then, when we

Fig. 372.—Dijon. Saint Bénigne. Crypt of the Rotunda. Capital (1096–1107).

Fig. 373.—Dijon. Saint Bénigne. Capital at east end of the underground church (1096–1107).

take into consideration the barrel vault of the chamber at the eastern extremity of the church, the method of covering regularly adopted for the earliest Christian

[1] Chomton, *Histoire de l'église Saint-Bénigne de Dijon.*

oratories in France, and in presence of the greater rudeness of the masonry of this chamber, and also of the persistence with which it was preserved, evidently as being a spot of peculiar sanctity, through the two rebuildings of the original church of St. Gregory, bishop of Langres, in the IXth and XIth centuries, we may fix the date of this oldest chamber at a period earlier than the IXth century, and perhaps in the time of the said bishop, while the other chamber may be ascribed to the IXth century.

On the ground floor, or church proper, the rotunda had the same plan as in the crypt ; but in the outer wall were engaged whole, and not half columns.

The basilica was in the form of a cross, with aisles and galleries, and was some 210 feet long and 85 feet wide. The height was about 50 feet in every part of the interior except the nave, which was some 65 feet. It was supported by massive quadrangular piers and columns, with shafts at the angles of some of the piers in the galleries. The nave, terminated by an arcaded apse, was flanked by vaulted double aisles ending in two chapels and two recesses like those of the underground church. Over the crossing rose a broad tower of stone.

On the first floor the rotunda was in the form of a crown, with a smaller circle of isolated columns, and a larger one of columns engaged in the outer wall. So far as one can judge from Plancher's sectional view, the capitals belonging to these columns, and to those of the upper story of the rotunda, were of the cubical shape to be seen in the underground part.

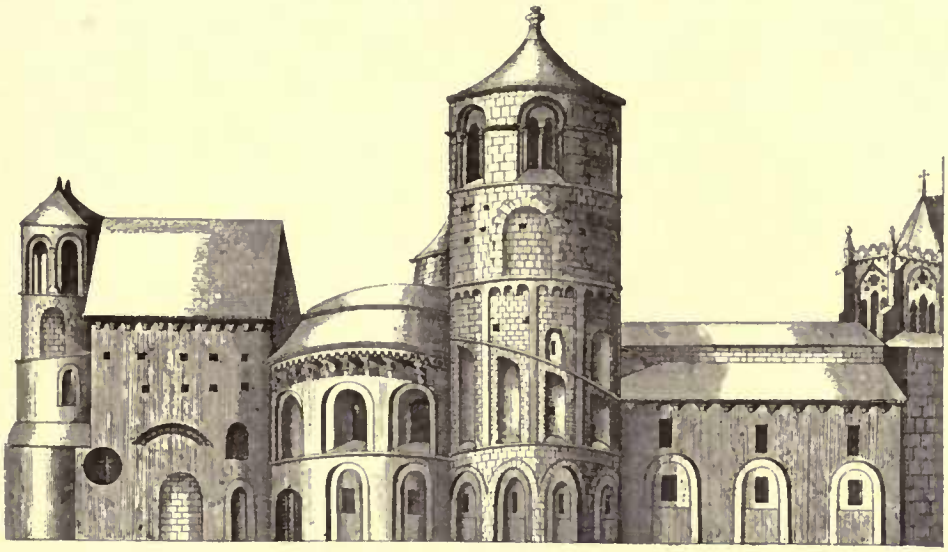
Interesting details of the two stories above ground are furnished by two paintings of the XVIIIth century, preserved in the sacristy of the present Saint Bénigne, which represent the rotunda in process of demolition.

In the upper story of the rotunda a chapel projected towards the east, above the square sanctuary of which rose a low tower of the same form, heightened in the XIIth century. This story communicated with the two below it by means of two spiral staircases, rising as high as the roof, contained within two round towers, also increased in height in the XIIth century, placed to the north and south of the rotunda, and forming part of its structure. The elevation of these towers was little more than that of the rotunda, as may be seen in the two pictures referred to, and in another which goes with them, giving a view of the interior of Saint Bénigne before 1792. At the foot of each spiral stair two passages started, connecting the rotunda with two arcaded galleries, and also with two spiral staircases which gave access to the roof and a way protected by a parapet all round the outside. Two other staircases, formed symmetrically in the front wall of the church, connected the galleries with the aisles below them. The building was provided with eight towers, in which other columns occurred, and had three entrances.

The exterior of the original portions of William's church still existing when Plancher wrote, and when the pictures mentioned in the sacristy of the present Saint Bénigne were executed, was decorated with blank arcading and arched corbel courses, in some cases continuous, in others broken by lesenas.

Such are the main features of the church as it has been described to us. About the rotunda we know enough to form a clear idea of what it was like. Not so of the basilica, where too much essential information as to its statical, constructive, and decorative features is wanting for us to be able to reproduce its real character even approximately. Nor are the inferences which we may draw from the various data, and from a comparison with other relevant buildings, sufficient to throw much light on the subject. A few considerations will show this.

It is known that, in the portion which formed the junction between the rotunda and the basilica, the walls of the central body rose very little above the horizontal line of the aisle roofs (Fig. 374); whence it might be inferred that the walls of the nave of the basilica were constructed in the same way. It is equally clear from Plancher's evidence that the nave was vaulted. We are also informed by a statement in the Dijon Chronicle that the aisles were vaulted as well. So that we might infer the same for the galleries, and consequently that the entire building was vaulted. This would account for the remarkable thickness (over 5½ feet) of the outer walls, and also for the adoption of the plan of keeping the walls of the nave low, with the object of resting the vaulting on them in such a way that the thrust should be resisted by the gallery vaulting and by the outer walls. This idea would be suggested by a fear in the minds of the architect and builders of compromising the stability of the nave if its walls were



Veue de la Rotonde de S^t Benigne de Dijon du côté du Septentrion et des restes des anciens Batimens qui y sont joints regardez du même côté

Fig. 374.—Dijon. Saint Bénigne. Elevation of the eastern end (1002–1018, and VIIth and IXth Centuries). (*From Plancher*, "*Histoire générale et particulière de Bourgogne.*")

raised high enough to admit of windows: a fear which is not difficult to understand when we consider the condition of statical science as applied to vaulting at the beginning of the XIth century.

On the other hand, the clear reference in the Chronicle to the parts of the basilica which had vaulting (very probably rude cross vaults like those in Ste. Marie at Bernay, founded in 1013, and also designed and built by William of Volpiano), viz. the aisles (". . . geminas porticus dupliciter transvolutas"), the very serious damage suffered by the church in the fire of 1136, and, thirdly, the fact that William had provided mainly wooden ceilings for the nearly contemporary church at Bernay, are all things which lead one to believe that originally the basilica had its nave, transept, and gallery roofed with timber in the same fashion as the church of Bernay, and also that of Cerisy la Forêt, rebuilt in 1030 either from the plans or under the immediate influence of William of Volpiano. In that case, the wooden ceilings of Saint Bénigne must have been substituted for a solid roof of masonry in the course of the restorations occasioned by the fire referred to, involving a reduction in height of the previously lofty walls of the nave so as to bring them into relation with the new

conditions of equilibrium established for the structure. It is impossible to suppose that these walls were at first blank and windowless, as Plancher's views would suggest, since the maximum height of the church (some 65 ft.) mentioned in the Dijon Chronicle (where the height of the nave and not of the central tower, as has been suggested, must be referred to), presupposes a lofty wall space for the introduction of light above the galleries, just as at Bernay and Cerisy la Forêt.

The doubt which arises as to the manner in which the basilica was roofed may be extended to the piers which separated the nave from the aisles. For while, on the one hand, one might imagine that they were alternately larger and smaller, on the other, the existence of supports of uniform size in the church at Bernay, known to have been built by the same architect, makes one suspect with good grounds that the same design was followed in both buildings.

It has been a common view that the plan of Saint Bénigne, so far as relates to the idea of joining a basilica on to a rotunda, was suggested by the example of the Holy Sepulchre at Jerusalem. This, however, is an erroneous idea, based on plans of the original church of Constantine which are partly imaginary, like De Vogüé's,[1] though the world has shut its eyes and accepted them, and exhibit a basilica ending in a semicircle with an aisle round it and three apses. In other cases the theory is based on statements which have no facts to support them. This is not surprising when we consider that the history, at any rate up to the time of the Crusades, of the complex of buildings which make up what is commonly called the Church of the Holy Sepulchre at Jerusalem is still involved in obscurity. And as I feel that it is a very desirable thing to try to remove that obscurity, I therefore undertake the task, so far as I may be allowed to accomplish it by the incompleteness of the historical documents and the absence of much essential information as to its construction and decoration which might throw light on the changes through which this famous sanctuary has passed.

THE CHURCH OF THE HOLY SEPULCHRE was only just founded by St. Helena in the year before her death, 327, when she went on pilgrimage to the Holy Places in the hope of forgetting the tragedies which had taken place in her family. The building was erected by Constantine the Great, and dedicated in 335.

It consisted of the "Anastasis," or Church of the Resurrection, at the west, containing the Holy Sepulchre; and the great Constantinian basilica, or "Martyrion," at the east. Between them came the sanctuary of Calvary (in Cyril of Jerusalem [IVth century] "Golgotha" means two things: the entire hill, and the summit or mound on which the cross was planted [2]) which was a space open to the sky, enclosed by a silver railing.[3 4 5 6 7] On this spot, brought into prominence by Constantine's levelling operations,[8] a chapel was erected by the younger Melania († 439).[9]

[1] *Les églises de la Terre-Sainte.*

[2] Migne, *Patr. Gr.* vol. 33.—*Descriptio et historia basilicae Resurrectionis.*

[3] *Biblioteca dell' Accademia storico-giuridica,* 1887.—Gamurrini, *S. Silviae Aquitanae peregrinatio ad Loca Sancta* (about 385–388).

[4] Eusebius, *Vita Constantini.*

[5] Tobler et Molinier, *Itinera Hierosolymitana et descriptiones Terrae Sanctae.—S. Eucherii epitome de Locis aliquibus Sanctis* (about 440).

[6] Id., *op. cit.—Breviarius de Hierosolyma.*

[7] Id., *op. cit.—Antonini martyris perambulatio Locorum Sanctorum* (about 570).

[8] Wilson, *Golgotha and the Holy Sepulchre.*

[9] *Analecta Bollandiana.—Vita s. Melaniae Iunioris. Auctore coevo et Sanctae familiari.*

About the Church of the Resurrection all that we know is: on the authority of the "Jerusalem Breviary" (of about 530 according to one view, or about 420 according to another) that it was in the form of a rotunda; from the evidence of Eusebius, that it contained magnificent columns; and, thirdly, from the statement of Antiochus,[1] that it must have had a wooden roof, as it was set on fire by the Persians (614).

Constantine's basilica is described by Eusebius as follows. It excited wonder by its dimensions. The nave was supported by columns, and flanked by double aisles with galleries over them. The interior was lined with marbles of various colours, while the exterior was faced with stone so finely wrought and adjusted that it did not yield in beauty to the marble. It terminated towards the west in a hemispherical apse, the interior of which was encircled by twelve columns symbolising the Apostles, each supporting a silver vase—an arrangement like that of some exedras in the Thermae of ancient Rome.[2] The ceilings of nave and aisles glistened with gold. The front of the church was turned towards the east, and contained three doors. Before it extended a spacious atrium.

This orientation is a confirmation of my statement that the Basilica Ursiana at Ravenna (370–384) was the first to have the apse placed at the east. Another piece of evidence is the basilica erected by Constantine at Baalbeck in the middle of the great court of the temple of Jupiter (138–249), with nave and aisles separated by rectangular piers; where the three semicircular apses (the lateral ones being terminated by little sacristies) are at the west, while in the transformation which the basilica subsequently underwent, the principal apse (semicircular internally but pentagonal externally after the Ravennate fashion) was placed at the east after the Ravennate model. This has been made clear by the excavations recently carried out in the great buildings of Heliopolis, which I have had an opportunity of examining personally.[3]

The external appearance of the basilica, with its gabled roof, the façade with its three doors, and the rotunda, is represented in the important mosaic from the church of Madaba, which gives a map of Egypt and the Holy Places, and is considered to belong to the early years of the VIth century,[4] or, more probably, to the time of Justinian (527–565). The church of Madaba, with its apse semicircular both internally and externally, shows that, at the time when it was built, the Ravennate plan of apses polygonal on the outside had not yet penetrated to the region east of the Jordan. In other parts of Syria, too, long after Christianity had become the official religion with Constantine, churches had apses in the form of round half-towers, as for instance the basilicas of Tafkha (ascribed to the IVth or Vth century) and Sueida (believed to be of the Vth). In the Syrian lands it seems that apses, curvilinear internally and polygonal externally, did not appear before the VIth century. Two of the earliest examples are St. George at Ezra (515–516) and the cathedral of Bosra (511–512).

In the mosaic referred to the artist represented in flattened perspective ("proiezione ribaltata") the essential features of the individual buildings which made up the vast complex of Constantine's sanctuary of the Holy Sepulchre, as they would appear to a spectator standing facing the propylaea. He has omitted the cloistered fore-

[1] Migne, *Patr. Gr.*, vol. 89.—*Epistola Antiochi monachi Laurae Sabae abbatis ad Eustachium praepositum monasterii Attalinae civitatis Ancyrae Galatiae.*

[2] Palladio, *op. cit.*

[3] Puchstein, Schuiz, Krencker, *op. cit.*

[4] PP. Cléophas et Lagrange, *La mosaïque géographique de Mâdabâ.*

court of the basilica, the enclosing wall, and Golgotha, which he was unable to include in his view (Fig. 375). He shows the propylaea which precede the fore-court, with the great flight of steps; the pedimented façade of the basilica with its three doors; the gabled roof of the basilica; and, last of all, the dome of the Anastasis which is represented in the same cadmium-yellow and orange-yellow tint used for the surface of all the pediments of basilicas figured on the mosaic. The perspective of the main body of the church hides the apse and a portion of the rotunda.

The fate suffered by the buildings connected with the Holy Sepulchre when Jerusalem in 614 fell into the hands of the Persian king, Chosroes II (591–628) (who was joined by the Jews of Ptolemais and the Galilaean mountains[1]), is well known: they were destroyed by fire. Afterwards, the patriarch Modestus set about rebuilding them (616–626): "he raised up again the venerable churches of our Saviour Jesus Christ which had been burned; viz. Calvary, and the Resurrection, and the venerable sanctuary of the precious Cross, the mother of churches, &c."[2]

Fig. 375.—Portion of Mosaic in the Church of Madaba (VIth Century).

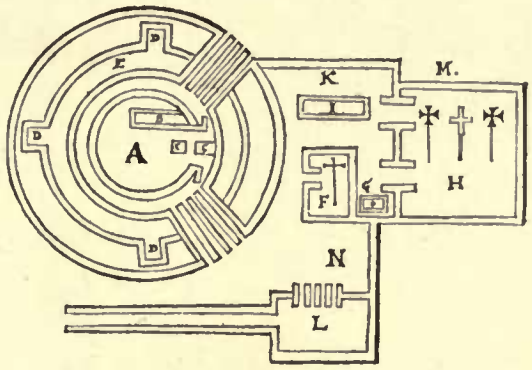
Some light, though incomplete, is shed on the results achieved, by the evidence of an eye-witness, Arculf. From the description which he dictated to Adamnan,[3] and from the ground plan of the buildings which he has preserved (Fig. 376), we learn that between the Anastasis and the Martyrion was interposed the church of Golgotha, having on its right another church of the same form, dedicated to St. Mary; and we gather that the principal church was no longer, as in the time of Constantine, the basilica but the rotunda. Lastly, we learn that the rotunda ("mira rotunditate") was annular, and that its dome was sustained by twelve columns "mirae magnitudinis." At the east were two entrances, each with four openings. In the centre of the building stood a circular isolated *tugurium* or chamber containing the actual Sepulchre.

Adamnan describes it as being "tota lapidea," from which one would infer that the church was entirely constructed of masonry, and, consequently, that the main walls survived the disaster of 614, and were only restored by Modestus. But this was not the case, for we learn from Eutychius[4] that the dome seen by Arculf was of wood, and that it was restored by Thomas, patriarch of Jerusalem, who imported the materials from Cyprus. And so Constantine's church of the Ascension, also rebuilt by the patriarch Modestus, which was in the form of a rotunda with concentric aisles, had a wooden roof except over the central space, which was open to the sky. Another VIIth century building at Jerusalem with a wooden roof was the octagon known as the Mosque of Omar, erected in the precinct of the ancient Jewish Temple between 684 and 687 by the Caliph Abd-el-Melek. For though the existing dome

[1] Rampolla del Tindaro, *Santa Melania Giuniore senatrice Romana.*
[2] Migne, *Patr. Gr.* vol. 89.—*Epistola Antiochi monachi.*
[3] Tobler et Molinier, *op. cit.*—*Arculfi relatio de Locis Sanctis, scripta ab Adamnano* (about 670).
[4] Migne, *Patr. Gr.* vol. 111—*Eutychii patriarchae Alexandrini annales* (Xth cent.).

is the result of a rebuilding (1022) of the original one destroyed by an earthquake (1016), still it must have been copied from it. It has also been observed before now[1] that there were other ancient buildings in Syria with wooden domes, as the thinness of the supporting drums indicates. Among them was the cathedral of Bosra; and the same is said to have been the case in the church of St. George at Ezra, where the present conical cupola of light concrete construction resting on raccords (the rest of the church being built of dressed stone set without mortar) is clearly of later origin.

A short description of Holy Places in Palestine, thought to be of the VIIth century, incorporated in the "History of Agvan" compiled by Moses Kagankavatsi probably at the end of the Xth century,[2] throws additional light to that provided by Arculf on the round church of the Resurrection, and some quite new light on the basilica of the Invention of the Cross or "Martyrion." The domed rotunda was one hundred cubits both in diameter and height. It contained two concentric circles of columns, with above them two ranges of twelve columns each. The Martyrion, separated from the Anastasis by a space of at least twenty cubits, also had ranges of columns one above the other, the number of shafts being sixty-five or seventy-five. This limited number of supports, in the case of a basilica with ranges of columns in two stories, suggests the small proportions of the Martyrion as restored by Modestus on a diminished scale; and this explains why Adamnan in his plan gave more space to the rotunda as compared with the basilica.



A. Tegurium rotundum.
B. Sepulchrum Domini.
C. Altaria dualia.
D. Altaria.
E. Ecclesia.
F. Golgothana Ecclesia.
G. In loco Altaris Abraham.
H. In quo loco Crux Dominica cum binis Latronum (crucibus sub terra reperta est.
I. Mensa lignea.
K. Plateola, in qua die ac nocte lampades ardent.
L. Sanctæ Mariæ Ecclesia.
M. Constantiniana Basilica, hoc est Martyrium.
N. Exedra cum Calice Domini.

Fig. 376.—Jerusalem. Plan of the buildings connected with the Holy Sepulchre in the VIIth Century. (*From Gretser*, "*Adamanni Scotohiberni de situ Terrae Sanctae.*")

These structures are mentioned about 720 by the Venerable Bede.[3] It is known that in 812 they were sacked by the Arabs from Egypt, and that the patriarch Thomas restored them between 813 and 833 in the days of the Caliph Mamun. It was after his restoration that they were visited by the monk Bernard.[4] We know, too, that they were damaged by a fire in 936. But the most serious disaster happened in 1010. Hakem, the Fatimite Caliph of Egypt (996–1021), commanded the destruction of the rotunda; and the order was so scrupulously carried out by the governor of Ramleh that, as we learn from William of Tyre,[5] Radulphus Glaber,[6] and Ademar,[7] it was levelled with the ground. A new rotunda was erected in 1048 by direction of the Emperor

[1] Texier and Pullan, *op. cit.*

[2] *Palestine Exploration Funa—Quarterly Statement*, October 1896: Nisbet Bain, *Armenian description of the Holy Places in the seventh century.*

[3] Tobler et Molinier, *op. cit.—De Locis Sanctis* (about 720).

[4] Id., *op. cit.—Itinerarium* (about 870).

[5] *Op. cit.*

[6] Delisle, *Historiae sui temporis.—De eversione templi Hierosolymorum et caede Judaeorum.*

[7] Id., *Ex chronico Ademari Cabanensis.*

Constantine X Monomachus (1042–1054). This was built "politis et quadris lapidibus," according to the statement of Radulphus Glaber, and was supported by twelve monolith columns and six piers. It had six doors, and galleries with sixteen columns. The roof was of wood, with a circular opening in the centre. Next to it on the east was an atrium containing various chapels, later put under cover by the Crusaders and connected with the rotunda, thus forming the basilica of the Holy Sepulchre. Other chapels flanked it on the south.[1][2][3][4]

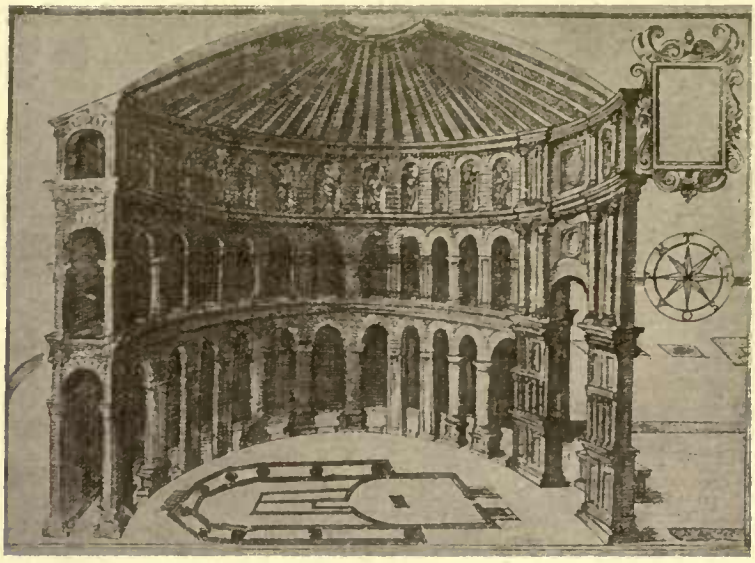


Fig. 377.—Jerusalem. Rotunda of the Holy Sepulchre in 1586. (*From Zuallardo, "Il devotissimo viaggio di Gerusalemme."*)

The date at which the buildings connected with the Holy Sepulchre began to undergo the alterations made by the Crusaders is not precisely known. It is, however, certain that it was later than the years 1102–1103 and 1106–1107, the dates of the pilgrimages to Jerusalem of Saewulf and of the Russian Hegumenus Daniel, respectively. The latter credits the Crusaders only with the construction of the isolated chapel or *tugurium* over the tomb of the Redeemer. And the alterations must have been effected shortly before the decade 1155–1165, for we gather from John of Wurzburg[5] that the construction of the new church, and

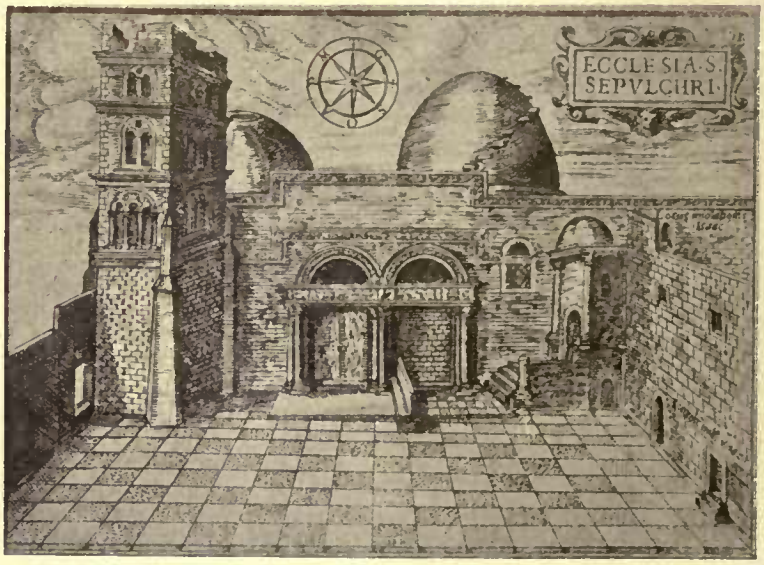


Fig. 379.—Jerusalem. Façade of the Church of the Holy Sepulchre in 1586. (*From Zuallardo, "Il devotissimo viaggio di Gerusalemme."*)

[1] Bourgogne et Martinet, *Relatio de peregrinatione Saewulfi ad Hierosolymam et Terram Sanctam, A.D.I. MCII et MCIII.*

[2] De Khitrowo, *op. cit.*—*Vie et pèlerinage de Daniel, hégoumène russe* (1106–1107).

[3] Tobler et Molinier, *op. cit.*—*Qualiter sita est Jerusalem* (before 1096).

[4] William of Tyre, *op. cit.*

[5] Tobler, *Descriptiones Terrae Sanctae*—*Johannes Wirziburgensis, Descriptio Terrae Sanctae.*

the alteration of the rotunda necessitated by putting the two buildings in direct communication, were a recent event. As a matter of fact the dedication took place in 1143.[1] For the church thus produced by the conjunction of the rotunda of Constantine Monomachus (1048) with the new church (XIIth century), the principal entrance was made on the south, approached through a "mout bel place"[2]—alas, how different nowadays!

In course of time the sanctuary was remodelled, tampered with, partially rebuilt, and for the most part concealed by structures of every description. In the

Fig. 378.—Jerusalem. Façade of the Church of the Holy Sepulchre (XIIth Century).

rotunda, of which I give a view taken in 1586 (Fig. 377), the three lofty semicircular recesses can only just be made out. The one to the south has been broken through at the bottom, and each has three windows in the half-dome.

A conspicuous piece of evidence about the church, in spite of its injuries, is the façade (Fig. 378). It was all built at one time, and of tufa, not limestone like the Constantinian building, remains of which may be seen in the Russian Convent. The

[1] Mariti, *op. cit.*

[2] Michelant et Raynaud, *Itinéraires à Jerusalem et description de la Terre-Sainte*—Ernoul, *L'estat de la cité de Jherusalem* (about 1231).

hand of time has given this façade of the XIIth century a uniform patina, alike in the constructive and decorative elements, thus indicating that it all belongs to one date. Against it in course of time was erected a bell-tower, "li clochiers del Sepucre"[1] or "li clokiers del Sepulcre"[2] or "li closchierz del Sepulcre,"[3] first mentioned by Theodoric about 1172.[4] By the year 1586 this tower had lost its top (Fig. 379).[5]

The façade exhibits four archivolts with fluted voussoirs, recalling the Futuh Gate (1087) at Cairo. The motive is copied on the front of the existing church of St. Anne at Jerusalem (Fig. 380), which some would take back to a rather early date (for instance, in the period before the Crusades),[6] though in reality it cannot be older than the taking of Jerusalem by the Crusaders (1099). This is proved by the compound piers, designed, like the corresponding half-piers and external buttresses, under the potent influence of the Lombardic School; and also by the Lombardic doorway in the façade. More evidence is provided by a capital (supposing it to be old) in the transept, carved with the motive of shallow truncated and inverted half-cones, with pointed leaves in the free spaces, which was imported from the West and may be seen in the abbey church of St. George at Boscherville (XIth and XIIth centuries). And in any case it is not credible that the architect of St. Anne, who came, it seems, from France[7] (it has been suggested that the building was of local execution, but that the plans were brought from Europe), endowed Palestine with a more developed system of construction than existed at home. And in St. Anne (where the arches are pointed) the transept has barrel vaults coming up to the central conical cupola, which rests on spherical pendentives, while the nave and aisles have cross vaulting with visible transverse arches. So that we shall be within the truth if we fix its date (as De Vogüé[8] has already done) in the second half of the XIIth century, and, to be more exact, after Judith, daughter of Baldwin II (1118–1131), had taken the veil there (1130).

Fig. 380.—Jerusalem. Church of St. Anne (XIIth Century).

[1] Tobler, *op. cit.*—*La citez de Jherusalem* (about 1187).
[2] Michelant et Raynaud, *op. cit.*—Ernoul, *op. cit.*
[3] Id., *Le continuateur anonyme de Guillaume de Tyr—La sainte cité de Jherusalem, etc.* (1261).
[4] *Libellus de Locis Sanctis.*
[5] Zuallardo, *Il devotissimo viaggio di Gerusalemme.*
[6] Mauss, *La piscine de Bethesda à Jérusalem.*
[7] De Luynes, *Voyage d'exploration à la Mer Morte, à Petra, et sur la rive gauche du Jourdain.*
[8] *Les Églises de la Terre-Sainte.*

The building, partly constructed of materials which bear masons' marks belonging to the age of the Crusades, was not long after (1192) turned into a school by the great Saladin, who had recaptured Jerusalem in 1187.

After this short digression we resume our subject. The existing Church of the Holy Sepulchre, so far as one can judge from what is visible, does not contain any decorative fragment from the first foundation. Thus the four capitals with foliage and cauliculi springing from a basket of woven wickerwork, now used in the chapel of St. Helena (Fig. 381) and mutilated in order to make them fit, are detached specimens of the epoch of Justinian, analogous to similar ones in the mosque "El Aksa," taken from the magnificent basilica of the Virgin completed by Justinian[1] and described by Procopius.[2] Again, the detached Corinthian capital having sharply cut acanthus leaves with the points turned over and a carved torus (Fig. 382), now to be seen on the ground floor of the northern limb of the church, belongs to the same period, as shown by its close relationship to Justinian's Corinthian capitals in the church of the Virgin just mentioned, and also to the capitals of the same order belonging to the so-called Golden Gate near that church.

Fig. 381.—Jerusalem. Church of the Holy Sepulchre. Capital in the chapel of St. Helena (VIth Century).

Fig. 382.—Jerusalem. Church of the Holy Sepulchre. Capital (VIth Century).

The same thing is true of the Byzantine capital formed of a basket of wickerwork, completely undercut, from which spring cauliculi at the sides of a wreath, with leaves below, to be found close to the other one we have just described in the Church of the Holy Sepulchre. This, too, may be compared with the similar ones in the mosque "El Aksa" (Fig. 383), and is to be ascribed to the VIth century, and in fact to the long reign of Justinian I (527–565), when magnificent constructions made Jerusalem the most splendid city of the East after Constantinople. This basket capital of the Holy Sepulchre must be distinguished from another of the same kind (Fig. 384) surmounting a half wall-column at the entrance to the court in front of the church, because, in spite of the similarities between them, they differ in composition, design, and

Fig. 383.—Jerusalem. Mosque "El Aksa." Capital (VIth Century).

[1] Conder, *The City of Jerusalem.*

[2] *Corpus script. hist. byz.—De aedificiis dn. Justiniani.*

execution. Moreover, the latter is carved in the same sort of stone as the façade, and belongs to the same date.

In the Vth century at Jerusalem the art of carving would not have been equal to the production of the capitals described above ; not to speak of the fact that it was only in that century that the basket capital was created by the School of Salonica. One of the earliest examples at Jerusalem would be a capital which is believed to have belonged to the church of St. Stephen, erected by the Empress Eudoxia, wife of Theodosius the Younger, and dedicated by her in 460,[1] supposing it were undoubtedly proved that the basilica with nave and aisles recently discovered really goes back to the days of that empress.

Fig. 384.—Jerusalem. Church of the Holy Sepulchre. Capital in the entrance court (XIIth Century).

Moreover, in the IVth century, that is to say in the reign of Constantine the Great, the design and carving of capitals followed the type still to be seen in the Church of the Nativity at Bethlehem (Fig. 385), founded by the Empress Helena (327) but erected by Constantine. For the existing basilica, with its nave and double aisles, ending in a choir with three apses (a Latin plan, previously employed in the basilica of St. Paulinus at Nola, which must have been built after 394, the year when Paulinus settled in the "Cemetery" of Nola, for the work was finished by 402), roofed with timber in all parts except the three apses, lighted by large round-headed windows some of which have been blocked up or altered, is the result of a remodelling

Fig. 385.—Bethlehem. Nave of the Church of the Nativity (327).

carried out under Justinian I, and not of a complete rebuilding, which that emperor had indeed in his mind but did not carry out. Hence his anger with his deputy,

[1] P. Lagrange, *Sainte-Étienne et son sanctuaire à Jérusalem.*

whom he caused to be beheaded.[1] That result is fortunate for us, as it has preserved the nave colonnades of the original church up to the point where the choir begins.

In them the shafts are formed of a yellowish stone from the local quarries, and were made, with the bases and capitals, expressly for the church. The bases are Attic; the capitals Corinthian, the body slightly moulded into a bell shape, but without a torus forming part of it. The acanthus leaves have not their tips arched over, but still retain a classical character, while the flower on the abacus is marked with a cross. The execution is so uniform that they seem to have come not merely from one stone-yard but from a single chisel, wielded by a hand which was fairly skilful though somewhat lacking in power.

Fig. 386.—Jerusalem. Golden Gate (VIth Century).

These colonnades cannot be assigned to the age of Justinian, for, like the nave of the old Vatican basilica (IVth century), they are surmounted by architraves and not by arches. Nor can the capitals. Very different were the capitals of the days of Justinian in Palestine, as those of the mosque "El Aksa" and of the so-called Golden Gate at Jerusalem (Fig. 386) tell us. De Vogüé[2] thought that this structure might belong to the Vth century, or at latest to the VIth; but it must be assigned to the latter, and in fact to the time of Justinian, that is to say to the golden age of Byzantine art. The determining feature is the obvious relationship between its Corinthian capitals and those of the same order and style in the mosque referred to.

It has been suggested,[3] on the strength of the description of the Holy Places referred to before as contained in the "History of Agvan,"[4] that the existing church of the Nativity retains hardly anything of the edifice of Helena and Constantine, and that the latter was vaulted, like the Basilica Nova at Rome (the work of Maxentius and Constantine), and afterwards destroyed by fire during the revolt of the Samaritans in 642. But the stone vaulting mentioned in that description must refer to the choir apses. Besides, it is not even remotely conceivable that a colonnaded basilica could

[1] Migne, *Patr. Gr.*, vol. III.—*Eutychii patriarchae Alexandrini annales* (Xth cent.).
[2] *Le Temple de Jérusalem.*
[3] P. Barnabé (of Alsace), *Le prétoire de Pilate et la forteresse Antonia.*
[4] *Palestine Exploration Fund, loc. cit.*

carry the very heavy vaulting of that period; and the same account speaks of ninety marble columns. One has only to think of the complex, ponderous system of supports which the architect of the Basilica Nova was obliged to adopt for carrying his complete roof of masonry, in order to see that my view agrees with the facts. It is also confirmed by the circumstance that the architect of the nearly contemporary Basilica Julia in the Forum at Rome, having employed simple cruciform piers, vaulted his aisles, but did not venture to do so for the nave, and had to be content with a wooden roof. When the builders of the Constantinian age did construct vaulting over colonnades, it was only in the case of circular buildings. And, on the other hand, the Samaritans would never have been able to destroy by fire a structure covered, like the Basilica Nova, with barrel and cross vaults of great thickness, with the roof tiles resting directly on the extrados.

And now we will conclude our story of the Holy Sepulchre with a few brief observations.

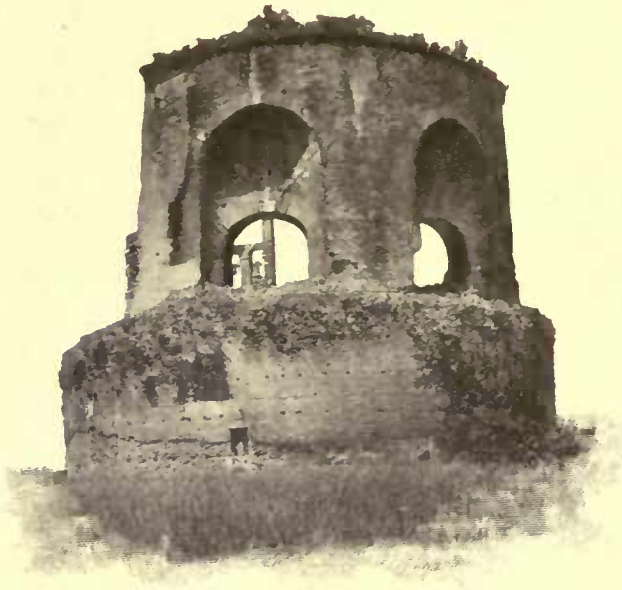


Fig. 387.—Rome. Mausoleum of St. Helena (IVth Century).

The plan of a tomb standing close to a church erected over a place of martyrdom is a Roman idea, followed at Rome by the Byzantines themselves, as is shown by the Imperial Mausoleum which formerly stood to the left of the old St. Peter's in the Vatican. It is also illustrated by the sepulchral church or mausoleum of St. Helena on the ancient Via Labicana (now Casilina) (Fig. 387), erected in a region where, among numerous other sacred memorials, stood the tombs of Saints Peter and Marcellinus, in the cemetery "ad duas lauros," over which Constantine, after his official recognition of the Church (313), built a basilica in honour of the two martyrs.[1][2][3][4] This structure belongs to the same class as the magnificent example in the Licinian Gardens at Rome (253–258), compared with which, though the masonry of the walls is less finished, and even contains fragments of a dentilated cornice, it shows a notable advance in the principles of construction. Thus the organic structure of the cupola is different from that of the Licinian edifice. There is no longer (as in the latter) a hemispherical vault, with its framework composed of radiating ribs meeting in the crown, resting on a lofty polygonal drum lighted by large windows, and strengthened on the outside by powerful buttresses corresponding to the re-entrant angles inside, and raised somewhat by means of steps above the impost of the cupola in order to be the better able to resist its thrust. Here, on the contrary, we get a vaulted dome, lightened by concentric rings of amphorae. Owing to the relief which this provided, the dome of the mausoleum of St. Helena was able

[1] Aringhi, *Roma subterranea novissima.*
[2] Caetani-Lovatelli, *Varia.—Una gita a Tor Pignattara.*
[3] Marucchi, *La cripta storica dei santi Pietro e Marcellino.*
[4] Tomassetti, *Della campagna Romana.—Archivio della R. Società romana di storia patria*, 1902.

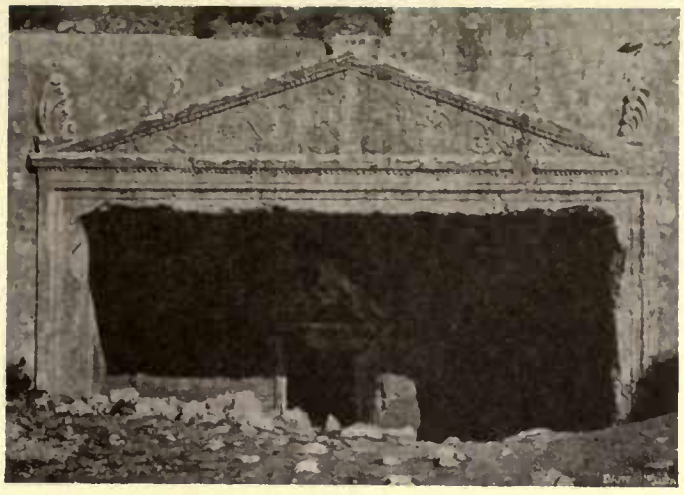


Fig. 388.—Jerusalem. "Tomb of the Judges" (Ist Century A.D.).

to be set up, without any buttressing, upon a lofty drum, lightened by niches on its exterior, and pierced by windows. And this fixes its date to a period later than the Licinian Nymphaeum, in other words to the early years of the IVth century, and after the death of Maxentius (312), when Constantine the Great was undisputed master of the Empire. The edifice was the regal monument destined to receive the body of his octogenarian mother; for it is to Rome, as Duchesne has proved,[1] that Eusebius refers in his Life of Constantine when he mentions the burial, seeing that in those days the Emperor had not yet turned his eyes to Byzantium.[2] The works necessary to convert the latter into the seat of government were only begun in 328, and Constantinople was not dedicated till 330.[3]

Fig. 389.—Jerusalem. "Tomb of Absalom" (Ist Century A.D.).

The aisled rotundas of the West were not copied from the Holy Sepulchre at Jerusalem, *i.e.* the earliest example of the form which the East can show, as is the general idea. Rather they were adapted from the plans of Nymphaeums and tombs at Rome, which was their place of birth, and formed a natural centre for their development, since no other city, or rather country, could ever show so large, or so varied, or so imposing a series of circular buildings, evolved from the germ of the round Etruscan tomb. And to those structures at Rome all others of the kind in the Roman Empire have to give place.

We are acquainted with the form given to sepulchral monuments in Palestine and the other districts of Syria before the time of Constantine. There is, for instance, among many others, the so-called "Tomb of the Kings" near Jerusalem, believed to be the burial place of the queen of Adiabene (about the middle of the Ist century A.D.). It is cut out of the rock, and the front was originally supported by two columns and decorated with festoons of leaves and fruit and with palm branches. There are also the so-called "Tomb of the Judges" (Fig. 388) and the "Tomb of Absalom" (Fig. 389), both

[1] *Le liber pontificalis.* [2] Bosio, *Roma sotterranea.*
[3] Van Millingen, *Byzantine Constantinople.*

regarded by De Vogüé[1] as belonging to the three centuries before the destruction of the city by Titus (70), while others think that they belong to about the first half of the Ist century A.D.[2] Then there is the tomb of Roman type at Kusr en Nueijis (Fig. 390) of the IInd century, and that of Hamrath with square base and stepped pyramidal roof at Sueida, thought to belong to the end of the Ist century B.C. Next comes the tomb of Aemilius Reginus (195) at Katura, surmounted by pairs of columns. Lastly, there are the tower-tombs, the most remarkable specimens of which are to be seen at Palmyra (Fig. 391); and the typical examples at Petra (the most important being the Khasneh Firun or "Treasury of Pharaoh") belonging to the age of the Empire. Any one who can find earlier example in this part of Asia, or in Greece or any other Mediterranean country, of structures of the type of the Licinian Nymphaeum, or of the Mausoleum of St. Helena, and of aisled rotundas with solid cupolas resting on isolated supports, like Santa Costanza, will be heartily welcomed. I was never so fortunate.

Fig. 390.—Tomb at Kusr en Nueijis (IInd Century). (*From a photograph furnished me by the "Palestine Exploration Fund."*)

In the Asiatic provinces, vaulted and domed rotundas with aisles were an importation from Rome, and originally were roofed with timber. This is shown by the celebrated church erected by Constantine in the middle of Antioch, which, according to Eusebius,[3] was octagonal, with galleries round the interior. It is not certain whether these were used as a matroneum, seeing that (as De Vogüé also noticed[4]) it may be gathered from a homily of John Chrysostom, presbyter of Antioch, and afterwards patriarch of Constantinople (398–404), that in the churches of the old seat of the patriarchate of the Eastern Church the men were placed on one side of the building and the women on the other, in enclosures formed by barriers of wood or more permanent material.[5] This church at Antioch, built probably after the death of the Empress

Fig. 391.—Palmyra. Tomb.

[1] *Le Temple de Jérusalem.* [2] Phené Spiers and Anderson, *The Architecture of Greece and Rome.*
[3] *Vita Constantini.* [4] *Syrie centrale.*
[5] Migne, *Patr. Graeca*, Vol. 58.—*Homiliae in Matthaeum.*

Helena, and even after the dedication of Constantinople (330), as it is mentioned by Eusebius after those events, must have been entirely ceiled with wood, and devoid of vaulting and a central cupola. As a matter of fact, Chrysostom, preaching in the principal church at Antioch, rebukes his hearers for finding his sermons too long, seeing that they are comfortably seated with a magnificent ceiling over their heads, whereas they were content to stand for a whole day in the circus, exposed to sun and rain, without ever complaining of the length of the performance.

Among the examples which still exist, the mausoleum at Rome known as Santa Costanza, erected between 326 and 329[1] (Fig. 392), is to be looked upon as the prototype of the vaulted aisled rotunda. This structure, which, as Duchesne says,[2] both research and the best accredited opinions refer without a shadow of doubt to the time of the Constantinian dynasty, is separated by only a short interval from the sepulchre of St. Helena. The cupola of the latter and its circular drum (both rising in stepped outline from a ground floor of similar plan, with exedras) have only to be set on an open arcade, and you have the aisled rotunda of Santa Costanza.

Fig. 392.—Rome. Santa Costanza (IVth Century).

And any one who has the wish and the ability to investigate the difficult subject of Roman architectonic science in what is regarded as the age of decadence, but really marks the culminating point of that science, as though the architecture of Pagan Rome, before sinking into the long slumber from which it was to be roused at a later time by the efforts of the Popes and the surrounding artistic influences, concentrated itself in one last ray of dazzling light—any one, I say, who makes that investigation will readily perceive how, in the course of the strivings of the "Urban" builders after the solution of the most difficult problems of equilibrium, the architect of the Basilica Nova had already indicated to his successor of Santa Costanza the conception of raising a great central dome on isolated supports by the aid of barrel vaults.

The rotunda of Santa Costanza—another instance of a circular mausoleum close to a basilica erected by Constantine, in this case (326–329) over the tomb of St. Agnes—in which the masonry in the original parts of the facing, formed of bricks of every quality and size, with thick joints, resembles that of St. Helena, must have been built before the works at Constantinople were begun. To take part in those works, destined to fit Byzantium for becoming the seat of government, craftsmen were invited (328) who would represent the best from every part of the Empire. In

[1] De Rossi, *Musaici cristiani delle chiese di Roma anteriori al secolo XV.*

[2] *Le liber pontificalis.*

Lydus[1] we read of a portico said to have been built by Campanians and marble workers from Naples and Puteoli. And it must have been finished before the Roman School, already weakened when Maximian made Milan his capital, was, so to speak, deprived of its vitality by the drain caused by the works of "New Rome," and before the progress in the science of construction and equilibrium, which had reached its climax in the days of Diocletian (284–305), Maximian (286–310), and Maxentius (306–312), had received its death-blow. This fatal event readily explains the sudden arrest of the splendid development which was leading to ever newer and bolder systems of vaulting—systems now recognized as worthy of the rulers of the world[2]—and the appearance of structures, of great dimensions indeed, but made up of old materials, and only roofed with timber. Such were the first great Christian basilicas, or occasionally a public market like that on the Celian at Rome (364–383), later converted into the church of Santo Stefano Rotondo (468–483).

Fig. 393.—Sketch of circular Roman building.

Any one who cares to give even a passing glance at the illustrations of Montano[3] or Bramantino,[4] or the Vatican drawings,[5] will find specimens of every kind of Roman sepulchral annular rotundas. Some have a central cupola buttressed by barrel vaults, with, sometimes, in the basement of the outer wall, a series of curved or rectangular recesses; while the inner concentric circle presents in some cases twelve or sixteen columns, either single or in pairs, on a common plinth, in others eight cruciform piers, in a third kind twelve square piers with half-columns. And if he wishes, he may at the same time verify, specially in Palladio[6] and Serlio,[7] the fact that the buildings of ancient Rome offer in their amazing variety (due to a large extent to the use of concrete) every one of the plans which we are told must have come from the East, but which, on the contrary, the East borrowed from the West. For if the reverse had been the case, the East ought to have been able to show all that variety of plan in examples of earlier date than those of the Rome of the Empire; and this is certainly not the case.

Before leaving this subject of the Holy Sepulchre, I must draw attention to two sketches of ancient Roman circular buildings which I have noticed in the Uffizi, and have had photographed for the first time (Figs. 393, 394). One of them is very interesting, not only because the internal facing is entirely in brick, but also on account of the form of the piers of the arcade which carries the cupola, and of the construction of the cupola itself. The latter shows on its intrados bands which intersect and form lozenge-shaped spaces filled in with horizontal brick courses.

And now to resume our subject. More than one feature of the church of Saint Bénigne is clearly derived from preceding buildings.

I. The rotunda in several stories is a direct descendant from the tombs with a

[1] *Corpus script. hist. byz.—De Magistratibus.*
[2] Blomfield, *The Mistress Art.*
[3] *Op. cit.*
[4] *Op. cit.*
[5] Vatican Library. Cod. Lat. 3439.
[6] *Op. cit.*
[7] *Op. cit.*

central tower of two or three stages, roofed with a circular vault (sometimes supported by internal wall piers), of which Rome affords so many examples. Any one who wants to verify this may go for examples to Montano[1] and Bramantino.[2]

II. The termination of the basilica, with its lateral niches and the rotunda behind, recalls the plan of the Pantheon at Rome (120–124), which must have been before the mind of Abbot William when making his design, seeing that the rotunda was dedicated to the Virgin (the basilica had been previously dedicated to St. Benignus) precisely on the anniversary day of the consecration of Hadrian's famous structure to "Sancta Maria ad Martyres," on its conversion into a church by Pope Boniface IV (608–615).

III. The arrangement of towers incorporated with the façade had been a feature of the Cluniac system from the time when Abbot Majolus introduced it in Saint Pierre le Vieux (982). The two round staircase towers flanking the rotunda, and its encircling aisles and gallery, are suggested by San Vitale at Ravenna (526–547).

IV. The idea of a tower raised over the crossing (applied shortly before in Saint Pierre le Vieux at Cluny) is derived from structures such as the mausoleum of Galla Placidia at Ravenna (about 440), or, more probably, from the ancient church of Santa Croce (about 449) in the same place. In France it was used from very early times, its presence there in the VIth century being disclosed by passages in Gregory of Tours and Venantius Fortunatus.

Fig. 394.—Sketch of circular Roman building.

I ought here to put on record the fact that the oldest example that can be produced of a church with a lantern tower rising over the chancel, and, moreover, with a solid roof, is that of San Salvatore at Spoleto. It will be convenient to give a short account of it at this point.

THE BASILICA OF SAN SALVATORE OR DEL CROCIFISSO, IN THE CAMPOSANTO AT SPOLETO, had been dedicated to the Saviour by 815, but was known as San Concordio in 1158.[3] It is a basilica with nave and aisles, which were originally more lofty than at present, the nave having been supported at first by columns carrying an architrave, after the fashion still to be seen in the presbytery (Fig. 395). It was also provided with low galleries, like Santa Maria in Cosmedin at Rome after Hadrian I's (772–795) rebuilding, as may be inferred from the remains of arches in the north wall of the nave The apse, raised above the presbytery, is flanked by two square sacristies, each provided with a small apse, which is a later addition. Above the presbytery rises a tower (Fig. 396) strengthened by buttresses at the corners. The transition from the square to the octagon is managed by means of four clumsy triangular raccords, almost like sloping pieces of wall. Everything suggests that they were made to carry a spherical dome, for which the present octagonal cupola has been substituted. The façade is finished off by a pediment and two half-pediments.

[1] *Op. cit.* [2] *Op. cit.*

[3] Sansi, *Degli edifici e dei frammenti storici delle antiche età di Spoleto.*

Its upper part is decorated with four pilasters, reaching nearly to the cornice. The capital of one of them has been found, and is now kept in the church.

There has been great variety of opinion about the date and origin of this very ancient church. Thus, for instance, Hübsch[1] thinks it belongs to the beginning of the Constantinian age, and that it was a Christian church from its inception, though the columns were taken from some Pagan building. But he is surprised to find the square bay between the apse and the triumphal arch, with a cupola rising above it. De Rossi,[2] on the other hand, regards it as the result of the conversion of a Pagan temple into a church, preserving the part which forms the sanctuary of the Christian building, with the addition of the nave and aisles and their façade. This transformation will have taken place in the time of Theodosius I (378–395) and his sons.

Fig. 395.—Spoleto. Church of San Salvatore or the Crocifisso. Chancel (IVth Century).

Grisar's[3] idea is this. Originally a Pagan building adapted to Christian uses, it was given its present form in the XIIth century. It contains no traces of work belonging to the Constantinian, Theodosian, or Gothic periods. The cupola is neither Pagan nor Early Christian. The only possible remains of the original Pagan structure which occupied the site are the plain jambs of the main door in the façade; and these were either set there in the XIIth century, or else kept in their original position.

In my view, this extremely important building is the work of one period, as is shown by the original masonry, not excluding the façade, which is intimately connected with the nave, and forms an integral part of the basilica. It also possessed a central tower with a solid roof, a fact revealed by the masonry, and also by the pains taken by the architect to ensure its stability.

[1] *Op. cit.*

[2] *Bull. di arch. cristiana*, 1871.—*Spicilegio d'archeologia cristiana nell' Umbria—Della basilica del Salvatore presso Spoleto.*

[3] *Nuovo bull. di arch. cristiana*, 1895.—*Il tempio del Clitunno e la chiesa spoletina di San Salvatore.*

The period of erection must be rather early, in view, not only of the two sacristies flanking the apse, but also of the architraves which carry the nave walls. Additional reasons are, the rudimentary form of the pendentives by means of which the square of the tower passes into an octagon, and the large round-headed unsplayed windows. The period is, perhaps, that subsequent to the age of Constantine. I say this, not because it was only then that Pagan buildings began to be robbed of materials to build churches, for that practice had begun as soon as Constantine had conquered Maxentius, as we see from, among other instances, Santa Costanza outside the walls of Rome. My reason rather is the character of the carvings executed expressly for the façade. They certainly do not exhibit the power of the chisels of the time of Constantine, but, on the other hand, there is not as yet the poverty, hardness, want of clearness both in design and execution, which characterise Italian work of the Vth century. Nor do they exhibit the typical features (and this applies equally to the capitals in the three windows of the façade) of VIth century carving. It is enough to compare the way in which the bead and reel mouldings and the ovolos are treated in either case.

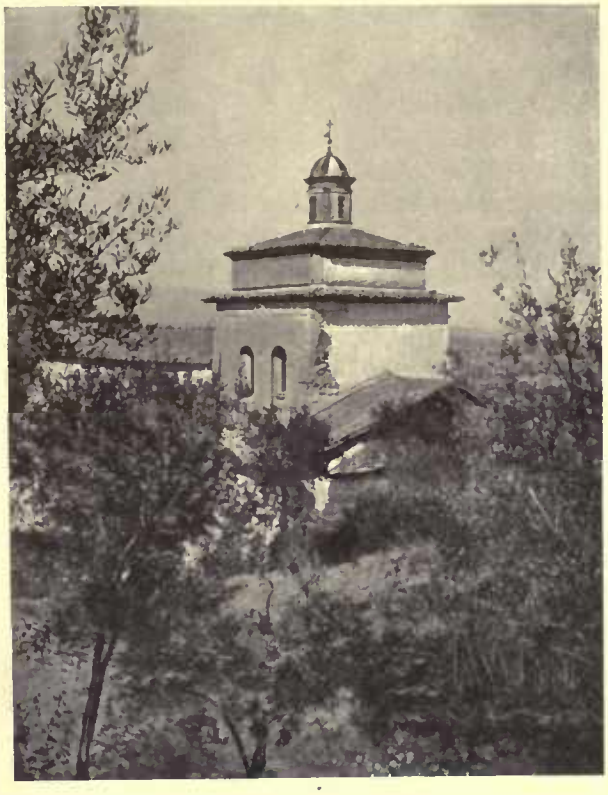


Fig. 396.—Spoleto. Church of San Salvatore or the Crocifisso (IVth Century).

The decoration of the doorway in the front of the church inspired in after times, among others, Melioranzio, the artist of the well-known central entrance to the cathedral of Spoleto (XIIth century), who, though he may have been superior in force to the carver who worked at San Salvatore, was inferior to him in delicacy of execution.

The adoption in this singular building of the Ravennate plan of an apse at the eastern end, of which the Basilica Ursiana at Ravenna (370–384) is the prototype, was made necessary by the nature of the site.

To return to Saint Bénigne:—

V. The arcaded choir appears to be derived from the very early open apse of San Sebastiano outside the walls of Rome (366–384), which is the prototype of this arrangement. Or it may have been suggested by the apse with three arches opening into an ambulatory, in the basilica of Severus at Naples (367, and about 387). Other open apses that may have formed the model are those of the basilica of St. Paulinus at Cimitile near Nola (394–402); the basilicas of Santa Maria Maggiore (IVth or Vth century) and SS. Cosma e Damiano (526–530) at Rome; the Basilica Vincentiana, now San Giovanni Maggiore, at Naples (554–577);

Santo Stefano at Verona (Xth century); and, lastly, the cathedral of Ivrea (973–1001 or 1002).

VI. The introduction of galleries in the basilica merely indicates the adoption of an arrangement which had become the fashion in Italy at the time, as applied in a building of almost the same date as Saint Bénigne, and certainly familiar to William of Volpiano—I mean the cathedral of Ivrea. It was an arrangement which did not originate then, any more than it originated in the days when San Salvatore at Spoleto (IVth century) and the suburban basilicas of Sant' Agnese and the SS. Quattro Coronati erected by Honorius I (625–638), or San Lorenzo by Pelagius II (579–590), were provided with galleries. Nor did it originate under Byzantine influence, as is commonly supposed.

It is indeed inconceivable that the Italian builders should have felt the need of such influence, when their forefathers had, as long ago as the year 179 B.C., provided the Basilica Fulvia Aemilia with a gallery, as we are informed by the reverse of a coin published by Babelon[1] and Cohen,[2] and by another reproduced by Hülsen.[3] Or, again, when they had before their eyes examples of civil basilicas, even divided by piers into nave and aisles, and with a gallery above the vaulting of the latter, as was the case with the Basilica Julia in the Roman Forum, which, even before its rebuilding by Augustus (12 A.D.), possessed a gallery occupied, on the occasion of important trials, by the two sexes separately.[4] At a later date, too, after its reconstruction by Diocletian (284–305) and restoration by the City Prefect Probianus in 416, it still exhibited its gallery carried by the cruciform piers and the vaulting.

The fact about galleried basilicas is this. When the Easterns began to erect Christian basilicas, and introduced women's galleries into them, as in the churches at Tafkha (IVth and Vth centuries) and Kanawat (IVth century), they derived the suggestion from the civil galleried basilica which had been developed (*e.g.* the IInd or IIIrd century example at Chaqqa) under the influence of Pagan Rome, which was its creator.

The Chronicle of the Abbey tells us who was the architect and director in chief of the works of Saint Bénigne, so far at least as his many and various duties and long absences allowed: "Et reverendus Abbas, magistros conducendo, et ipsum opus dictando. . . ."[5] It also informs us that the prior Arnulf, from the diocese of Toul, took part in the work of supervision. Many, indeed, from an incorrect interpretation of another passage, would give this supervision, but restricted to matters of decoration, to the monk Unald, of whom they make an accomplished carver. But the Chronicle, though mentioning the assistance which he gave to Abbot William ("ad omnia quippe quae sibi erant necessaria, praedicti fratris iuvabatur solertia"), states that he was entrusted with the care of the church, and performed his duties with such zeal that almost all the ritual ornaments were gathered together by his efforts: in other words he was the Sacrist or Apocrisarius of the church: "Denique iniunxit illi curam huius sacri periboli, quam tanta prosecutus est cura, ut paene totum quicquid fuit ornamentorum in hac basilica, eius studio sit aggregatum."

As to the workmen, there are different opinions. If we are to believe Cordero,[6]

[1] *Description historique et chronologique des monnaies de la République Romaine.*
[2] *Description générale des monnaies de la République Romaine.*
[3] *Il Foro Romano.*
[4] Lanciani, *The Ruins and Excavations of Ancient Rome.*
[5] D'Achery, *Spicilegium.—Chronica S. Benigni Divionensis.*
[6] *Op. cit.*

they were Italians. His opinion is based on the Chronicle. But although it describes a remarkable emigration of Italians to Burgundy about the epoch of 1000 ("Coeperunt denique ex sua patria, hoc est Italia, multi ad eum convenire ; aliqui litteris bene eruditi, alii diversorum operum magisterio docti, alii agriculturae scientia praediti, quorum ars et ingenium huic loco profuit plurimum"), it makes it equally clear what was the result, namely, to increase the number of monks under the rule of William ("Crescebat ergo quotidie multitudo monachorum sub eius magisterio degentium"). But there is no suggestion of Cordero's statement that William laid the foundations of the new church of the monastery of St. Benignus "with the aid of a band of Italian craftsmen."

Again, if we were to listen to Merzario,[1] the workmen in question were neither more nor less than Comacine masters. But his view is based on nothing more than the use in the Dijon Chronicle of the expressions "magistros conducendo" and "opus dictando," which he thinks are taken from the CXLVth section of the Edict of the Lombard king Rotharis (636–652), and on the assertion that, before the epoch of about 1000, the Lombards, "with their methods, their formulas, their exclusive predominance in the region of art," resorted to France to act as builders, and to teach others to build ; and of that there is no proof.

On the other hand, our limited knowledge of the constructive, static, and decorative elements of the original building does not give much help in answering the question. However, I feel that we shall not go far wrong if we ascribe the erection of the church to Italian master builders, associated with Burgundian masons and workmen. Burgundy cannot have been entirely without such, for the tradition of the art of building had never been interrupted there. Without going back to still earlier times, as long ago as the partition (768) of the kingdom of Pippin III (752–768) between his sons Charles (768–814) and Carloman (768–771), opportunities of one sort or another had not been wanting to the craftsmen of those countries for practising the art of building, either in the form of the erection of new ecclesiastical edifices, or of the renewal and restoration of old ones. And this, notwithstanding the frequent family and civil wars which followed the division of the Empire made at Aachen in 817 by Louis the Pious (814–840), and culminated in the period between the death of Lothair (840–855) and the deposition and death of Charles the Fat (887). That partition marked in France (and equally so in Germany) the extinction of the family of Charles the Great. For Charles the Simple was held to be the bastard son of Louis the Stammerer (877–879), and the last sovereign of this illegitimate line was Louis the Fainéant (986–987).

Nor was building prevented by the raids of the Saracens or, what were more serious, those of the Danes or Normans who, after the battle of Fontenay (841) had opened the way for the destruction of the Frankish Empire, and the treaty of Verdun (843) had brought it about, made themselves masters of most of the French rivers, and spread terror, desolation, and death, in every direction.

Further, the builders of Burgundy had not been without opportunities of going to Italy for training (if they felt the need of it) in the art of construction, in the days of Louis III King of Provence (887–928), of Rudolf II King of Transjuran Burgundy (911–937), of Hugo Duke of Provence (911–947) and his son Lothair (946–950), who were elected Kings of Italy respectively in the years 900, 922, 926, and 946. And so, the character of the barrel vaulting in the crypt of the rotunda of Saint Bénigne (rebuilt, as we saw, on the original lines) suggests the school of builders who con-

[1] *Op. cit.*

structed the similar vaulting in the staircase of the campanile of San Benigno at Fruttuaria (1003–1006). The arched corbel courses divided into groups, by lesenas, which decorated the towers of the rotunda, point to the gilds of Upper Italy who were the first to apply (in the tower of San Satiro at Milan, of 876) this form of architectural decoration to towers, and had used it with good effect, not long before, on the towers of the cathedral of Ivrea. I have searched in vain through France for a tower of certain date with this decorative treatment, older than the rebuilding of Saint Bénigne.

The Pre-Lombardic cubical capitals are clearly the work of the school whence came the chisels which wrought the nearly contemporary original capitals in the crypt and ambulatory of the cathedral of Ivrea (973–1001 or 1002), and the one of the same date in the crypt of the cathedral of Aosta (XIth century).

Then there are the Pre-Lombardic figure capitals in the Lombardic style, the earliest specimens of certain date to be found north of the Alps. In those countries, from Merovingian times onwards, the only previous example I can point to is a capital in the crypt of Saint Pierre de la Couture at Le Mans (997), with water leaves, those at the angles being of crocket form, and on each face a human head, infantile in execution and design, taking the place of the flower. But these capitals, with their representation of a man supporting the abacus, reveal a chisel from Cisalpine Gaul. This motive was dear to the Lombard gilds, and was borrowed by them from the Romans, who used to represent living figures supporting with head or hand the abacus of a capital; or they may have taken it from the Etruscans, who sometimes in their designs of squares in carving figured a man supporting the frame above him with his hands, as shown in Fig. 152, and again on a sculptured stone of the archaic Etruscan period in the Archaeological Museum at Florence, in which one of the figures is a telamon holding up the interlaced top of a square compartment.

All these details prove that Piedmontese craftsmen trained in the Lombardic School took part in the works of Saint Bénigne at Dijon, or possibly some Lombard gild, but not one of the best, considering the exceptional poverty and rudeness of the capitals in the rotunda compared with the markedly superior art of capitals produced by those gilds about the same time, *e.g.* those in the crypt of the parish church of San Vincenzo at Galliano (1007), and others in the church of San Babila at Milan (XIth century).

But, granting this, we cannot believe that Burgundian builders were not given some share in the work, either restricted to duties of secondary importance, or even entrusted with those of a higher order under the direction of experienced master builders from the Italian side of the Alps. It is well known that the erection of Saint Bénigne was aided by the moral and material support of the Court of Burgundy, of Bishop Bruno who was related to the reigning family, and of Majolus the powerful abbot of Cluny. It is therefore quite reasonable to infer that local craftsmen were invited to take part in the work, and the best, inasmuch as the subject was a church regarded in those days, as Radulphus Glaber says,[1] as the most magnificent in France, and demanding a degree of knowledge of the principles of construction which was for that age remarkable. Still, the local builders could not have possessed an experience equal to that of the craftsmen who came from the south of the Alps; otherwise there would have been no need to summon the latter to France.

The employment of Burgundian workmen was also made desirable by the financial difficulties with which from time to time Abbot William had to contend in

[1] Mabillon, *Acta Sanct. Ord. S. Benedicti—Vita S. Guillelmi abbatis Divionensis.*

the course of his operations ; difficulties which were certainly not of a character to encourage him to rely exclusively on the more expensive services of builders of his own nationality. The presence of skilled Italian workmen tells its tale as to the real capacity of the Burgundian builders, and further informs us that, as they were not capable of venturing upon operations which demanded a considerable knowledge of the principles of construction, the religious buildings erected in their own country in the days before they were reached by Italian artistic influence must have been of a modest character so far as those principles were concerned.

In addition to builders, Burgundy must have contained carvers. Then there arises this dilemma. Either the carving of the original capitals in William's crypt was executed by Italian hands, and, as we said, certainly not hands of great experience ; and in that case, barbarous as it is, it was beyond the powers of the local chisels, for otherwise they could have been entrusted with the work ; or else it is the product of French hands (not, of course, of the monk Unald, as we showed just now), and then these capitals represent the best that French artists could do at the beginning of the epoch of about 1000, and give us a standard of their ability in the treatment of the human figure.

At the time of the erection of Saint Bénigne, and indeed throughout the first quarter of the XIth century, the carvers both of Burgundy and of France generally were at a very low level in the treatment of the figure in sculpture—the capital in Saint Pierre de la Couture at Le Mans (997) tells us how low. It is only by unduly moving back the dates of buildings that so many writers have been able to prove the contrary. Thus the imposing two-storied porch of the monastic church of Saint Benoît sur Loire is dated by Gailhabaud [1] and others in the two years following the fire of 1026 under Abbot Gauslinus, bishop of Bourges (1014–1020–1029), who began the erection of a tower of squared stone which he was unable to finish.[2] But the capitals carved with figures of realistic or fanciful character, and other figure sculpture on the exterior (very different both in design and execution from, I will not say the very unfavourable specimens in Saint Bénigne, but from those in the monastic church of Cerisy la Forêt [1030–1066] which show some improvement), point to a much more advanced period, certainly decidedly later than the first half of the XIth century. The fact is that, so far as the church is concerned, the work of Gauslinus was confined to mere restoration, and the rebuilding had to be undertaken by Abbot William who was cut off before he saw its completion : "Ecclesiam multis incendiis devastatam et senio praegravatam novo iacto aedificare coepit fundamento." The new structure was finished in 1108 under Abbot Simon, and King Philip I (1060–1108) was present at the dedication.[3] [4]

There are writers who are surprised that Saint Bénigne, being so conspicuous as it was, did not serve as a model for many other churches. But this is easy to explain when we remember that the form of the building, besides being too complicated, was not that on which the Latin Church had set its seal. It was out of touch with the artistic traditions of the Western peoples, nor was it the best fitted for the requirements of Western ritual. And so it came about that even its own author did not repeat it.

Then, there are others who would see in it the first or one of the first specimens of Lombardo-Norman architecture in France. But this is not in accordance with the facts. The result, as it was, of the Roman, Romano-Ravennate, Byzantino-Ravennate,

[1] *L'architecture du V^e^ au XVII^e^ siècle.*
[2] Delisle, *Ex libello Hugonis Floriacensis monachi.*
[3] Id., *Ex chronico coenobii S. Petri vivi Senonensis.*
[4] Id., *Ex libello Hugonis Floriacensis monachi.*

and Pre-Lombardic monuments seen by its architect in the course of his long journeyings in Italy, the church at Dijon, to judge by what we know of it, did not present one of the original and distinctive characteristics of the Lombardo-Norman style, which we shall specify by degrees in the course of our work.

Nevertheless it had the merit of providing its designer with the opportunity of putting into practice on a large scale, and with a difficult problem to solve, his ideas in the matter of construction, and the monks who were his assistants with experience in directing the works of a great building. Thirdly, it gave the local workmen the advantage of taking part in the erection of an edifice of exceptional importance for that time and place, and of acquiring familiarity with the very difficult art of vault construction, complex forms of which were here presented.

From its underground part there did originate one characteristic feature of the Lombardo-Norman basilica ; I mean the chapels projecting from the arms of the transept. It appears in the Norman and English churches erected from the plans of William of Volpiano, or if not from his plans, certainly from those of his disciples and under his advice. In other cases the plans came from his pupils, or from Lanfranc of Pavia.

Here, too, was seen for the first time in France the Pre-Lombardic cubical figure capital. Previously, and as far back as the time of Pippin III (752–768), the Pre-Lombardic type had been seen, and even in a decorated form, but not with figures. Instances are to be found in the crypt of the abbey church of Flavigny (755–768), the churches of Germigny des Prés (801–806) and Saint Pierre at Jumièges (940), and the chapel of Sainte Blandine in Saint Martin d'Ainay at Lyons (about 966).

Such facts, combined with other pieces of evidence, put into our hands the main clues to the history of the buildings erected in Burgundy and the neighbouring provinces before the epoch of the year 1000. Their rarity is due, not so much to Saracen, Norman, or Hungarian ravages, as to the passion for innovation in the XIth century, referred to by Radulphus Glaber,[1] which spread over the whole of France, and destroyed so many buildings in order to reconstruct them in a form more consonant with the new fashions. It is true there are writers who will not admit their almost universal disappearance. Thus, for instance, Revoil,[2] led astray by the erroneous idea that the Lombardic style, which he regards as the source of the Carolingian, had reached maturity centuries before it was born, has dated in the centuries from the VIIIth to the Xth a whole batch of religious structures in southern France. But what must we think of attributions such as the following ?

The chapel of Saint Gabriel near Tarascon is regarded as belonging to the first years of the IXth century, and identified with one mentioned about 858 in a charter of Charles the Bald and his first wife Hirmentrudis. And this in the face of its pointed barrel vaulting, and the rose window enclosed within a pointed arch in its front. Yet the pointed arch did not appear in European churches before the second half of the XIth century. And so, not only in the first half of that century, and in the same district as Saint Gabriel, do we find the chapel of the Holy Cross at Montmajour, near Arles (1018), still presenting only arches which are round and not pointed like the transverse ones in the nave and the one in the gable front of Saint Gabriel, but as late as 1063 the chapel of Saint Trophime near Arles was built with arches and vaulting of semicircular form. Rose windows, again, were not invented till the next century, and that is the date indicated by the carving in the chapel.

[1] Delisle, *Historiarum sui temporis &c.—De innovatione ecclesiarum in toto orbe.*
[2] *Architecture romane du midi de la France.*

The abbey church of Saint Guilhem du Désert (originally the church of Gellone) is still believed to be the one founded by William, Duke of Aquitaine, which must

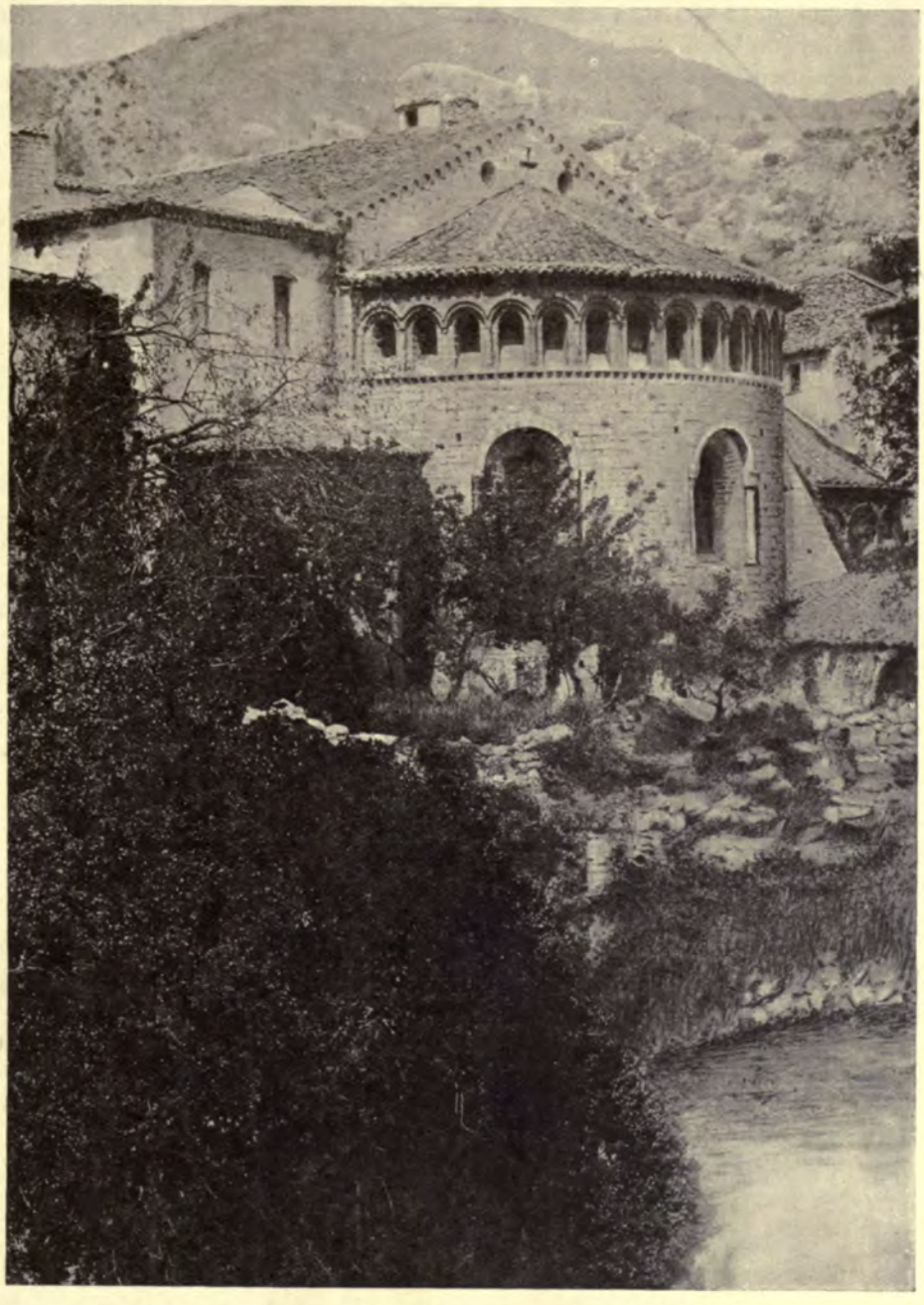


Fig. 397.—Saint Guilhem du Désert. Apse of church (XIIth Century).

have been finished in 806. Later it was restored or altered under Louis the Pious by Juliofredus, its first abbot.[1] [2] But a glance at the apse (Fig. 397) with its range of deep

[1] Delisle, *Ermoldus Nigellus Exul—De rebus gestis Ludovici Pii.*
[2] Id., *Vita Hludowici Pii imperatoris.*

arched niches, decorated in front with shafts and enclosing arches springing from heads, or at its Lombardic portal, and the ribbed vaulting of the porch, is sufficient to show that they are not earlier than the XIIth century. And as the side walls of the nave (Fig. 398) have facing of different and less regular masonry than that at the end of the building, and, moreover, as even the plan of the church suggests that there has been some alteration, one may infer that the side walls are older than the XIIth century. But their date cannot be that of the original foundation, for the church of Duke William was a mere oratory paved with precious marbles, which formed a beginning for his monastic foundation, and was hastily finished.[1] It was no basilica with nave and aisles over 42 feet wide. To settle the two periods of construction we have the assistance of two dates connected with important facts. The first is the year 1076, when the altar of St. William was solemnly dedicated in the presence of the Papal Legate Amatus, and the consecration of the church followed.[2] With this date we may connect the rebuilding of the church, which took place after the confirmation of the privileges (1066) and the immunity (1068) granted to the monastery.[3] The other date is 1138, when the second translation of the relics of the saint took place.

Fig. 398.—Saint Guilhem du Désert. Side of the church (XIth Century).

The corbel courses grouped by lesenas on the side walls of the church suit well a period not far removed from the first date (1076). The ecclesiastical buildings erected north of the Alps in the days of Charles the Great had external decoration of that kind, as we may see from the abbey church of Saint Riquier or Centula (793–798) according to a view of it preserved for us by Mabillon,[4] from the Palatine Chapel at Aachen (796–804), and from Theodulf's church of Germigny des Prés (801–806). The earliest certain example of the treatment in France is presented by the two staircase towers of Saint Bénigne at Dijon, and there only by virtue of Lombardic influence. And it was not till the XIIth century that any very extensive use was made of it, as on the magnificent bell-tower of Saint Théodorit at Uzès, and that of Saint Trophime at Arles.

Nor shall we offend against logic or probability if we assign the alterations, for

[1] [2] Mabillon, *Acta Sanct. Ord. S. Benedicti—Vita S. Willelmi ducis ac monachi Gellonensis in Gallia.*
[3] *Soc. Arch. de Montpellier.—Cartulaires des abbayes d'Aniane et de Gellone.*
[4] *Acta Sanct. Ord. S. Benedicti.—Vita S. Angilberti abbatis Centulensis in Gallia.*

instance, those in the apse and the porch, to the years immediately preceding the second date, 1138. The decorative scheme of a range of deep arched niches, applied to the apses of churches, rotundas, and baptisteries, created in the case of Sant' Ambrogio at Milan between 789 and 824, continued, and that too in the land of its birth, to lack the adjunct of shafts up to the time of its transformation into open galleries. In the heart of the world that created them, there are only rectangular piers for the ranges of niches in the basilica and baptistery of Agliate (824–860); the basilicas of San Vincenzo in Prato (835–859), San Calimero (IXth or Xth century), Sant' Eustorgio (Xth century), San Celso (996), and San Babila (XIth century) at Milan; the Rotonda at Brescia (XIth or XIIth century); the baptisteries of Biella, (Xth century) and Novara (Xth century). For this reason it must have been long after the erection of San Babila at Milan and of the Rotonda at Brescia, and only when the Lombard gilds had transformed their ranges of arched niches into open galleries with small shafts, exhibited for the first time in San Giacomo at Como (1095–1117), that the niches of Saint Guilhem du Désert, with their compound supports and enclosing arches resting on heads, can have been constructed.

As for the portal, we know that this kind of doorway had its beginnings about the year 1032 in Sant' Andrea at Montefiascone. Shortly after the middle of the XIth century we find it in a still modest garb in Saint Étienne at Caen (1066–1086), and at the beginning of the XIIth, when it had been discovered that it was more effective in proportion as the orders were multiplied, in a fairly advanced shape and sumptuous attire at Cluny (1089–1130), Vézelay (1096–1132), and other churches.

Lastly, there is the ribbed vaulting in the porch. We know that cross vaulting with diagonal arches or ribs makes its first unquestioned appearance in San Flaviano at Montefiascone (1032), and that it was afterwards used in the cathedral of Aversa, in Sant' Ambrogio at Milan, and in the church of Rivolta d'Adda, all structures of the XIth century. But north of the Alps it was not seen till about the end of that century; and Durham Cathedral, the first stone of which was laid in 1093, affords the earliest dated example.

The church of Saint Quenin near Vaison, in its oldest part—the chancel—is supposed to have been built by order of Charles the Great or his successors; but we have only to notice the ribbed vault of the apse, and the crouching animal carved on the keystone of the vaulting, to see that we have to deal with a building of the XIIth century. It was towards the end of the XIth century that the carving of keystones in vaulting started in Italy. There is a rudely carved lamb at the intersection of the diagonal arches in the nave of the church at Rivolta d'Adda. North of the Alps it appears with the rise of Pointed architecture, and in some cases in the very first churches in that style. Thus the cross vaulting with moulded ribs in the western towers (1134–1144) of the cathedral of Chartres has the point of intersection left plain, while the main vaulting of similar type in the cathedral of Sens (begun in 1140) is ornamented by a rosette at the intersections.

It is appropriate to notice here that an archaic example of ornament applied to a keystone of vaulting is afforded by the well-known Etruscan tomb of the Volumnii near Perugia (believed to be of the IIIrd century B.C.), where the head of a Gorgon appears in the middle of the stepped squares which form the ceiling.

The cupola of the church of Notre Dame des Doms at Avignon, together with the other parts of the structure, is thought to be a work of the time of Charles the Great. Now this cupola rises from Campano-Lombardic hooded pendentives, a form of Italian origin which did not migrate to other countries till about the middle of the

XIth century, when it had reached its full development. It appears as a conchiform squinch in the western towers of Jumièges (1040–1066), though not long after there are good specimens in the transept towers at Cluny.

In the cathedral of Vaison, the apse with the bay in front, and the apsidal chapels, are reputed to belong to the Merovingian age. The three bays before the latter are supposed to be of the early Carolingian period; and the whole was probably restored by Bishop Humbert I (996), who will have added the bell-tower which rises above one of the minor apses. And all this though we know from Boyer, the historian of the church of Sainte Marie de Vaison, that it was built by the said bishop, and though the existing structure is, from its vaulting, evidently of the XIIth century, when the east end of the original church was preserved in an altered form. As a matter of fact, Choisy[1] considers the body of the church to be the result of a rebuilding following the destruction of the city in 1160.

Having made these observations we will now return to our subject, and pass in review some of the very rare buildings still surviving in Burgundy and the neighbouring districts, which really belong to the Merovingian (481–752) and Carolingian (752–987) ages and the years up to the epoch of 1000, and retain sufficient constructive and decorative elements to form the basis for profitable comparisons and reasonable dating of other edifices which have been wrongly classified.

Fig. 399.—Grenoble. Crypt of Saint Laurent (VIth Century).

THE CHAPEL (NOW CRYPT) OF SAINT LAURENT AT GRENOBLE.—Below the presbytery of the present church of Saint Laurent (considered to belong to the XIth century) is situated a small church which forms its crypt. It is a three-lobed structure, with the addition of a fourth arm in the end or western wall (Fig. 399). Over the central part is a barrel vault. The half-domes of the subordinate apses in the transverse portion are formed by concave sections carried by small arches. The principal apse at the eastern end has a similar vault, and the angles of its face are decorated with single shafts, above which are doubled shafts. The large apse at the west end was probably added when the three-lobed chamber was turned into a crypt: in any case, it is the result of an alteration in the structure. In the body of the chapel we notice the stylobate on which stand the shafts with capitals carrying high Ravennate pulvins (Fig. 400) supporting a plain architrave. The carving of these capitals recalls that on two of the Visigothic period, with leaves,

[1] *Histoire de l'architecture.*

water-lilies, stars, and crosses, at the principal entrance of the Mosque at Cordova, founded by Abderrahman in 785, to which they were brought from the church dedicated to the deacon-martyr, St. Vincent (304), built after King Reccared's conversion to Catholicism (586–601).

The date of the chapel of Saint Laurent, which I regard as the oldest church in France, is unknown. The general view is that it may be ascribed to the VIIth century. I believe, on the other hand, that the proper date is the second half of the VIth century, and perhaps the period when the see of Gratianopolis was held by Bishop Isicius (573–601). A date near to the VIth century has already been suggested.[1]

Fig. 400.—Grenoble. Crypt of Saint Laurent. Capitals (VIth Century).

The Ravennate figure pulvins must follow close on the archetypes of the kind for western Europe, to be seen in San Vitale at Ravenna (526–547). At the same time they must be earlier than the moulded specimens in the Merovingian crypt of Jouarre (653). The capitals, too, cannot be assigned to the time of King Pippin (752–768) or later, because, as we shall see when we come to the crypt of the church of Flavigny (755–768), a different type of capital was then in vogue in France.

Fig. 401.—Rome. So-called "Tempio di Siepe" (IInd Century). (*From Giovannoli, "Vedute degli antichi vestigj di Roma."*)

This chapel presents two notable characteristics. The first is that of the three segmented half-domes, the earliest specimen of the form that I have met with north

[1] *Bulletin archéologique*, 1893—Reymond et Giraud, *La chapelle Saint-Laurent à Grenoble.*

of the Alps. The idea of breaking up the intrados of a cupola is said to be of Eastern origin, though really it was a Latin invention, of the time of Hadrian

Fig. 402.—Tivoli. Villa of Hadrian. Vestibule of the Palace (125-135).

(117–138). Thus, the intrados of the dome of the circular building known as the "Tempio di Siepe" at Rome was composed of a succession of concave sections (Fig. 401). Another interesting feature of this dome was the round openings with which it was pierced—the earliest example of such treatment that I know.

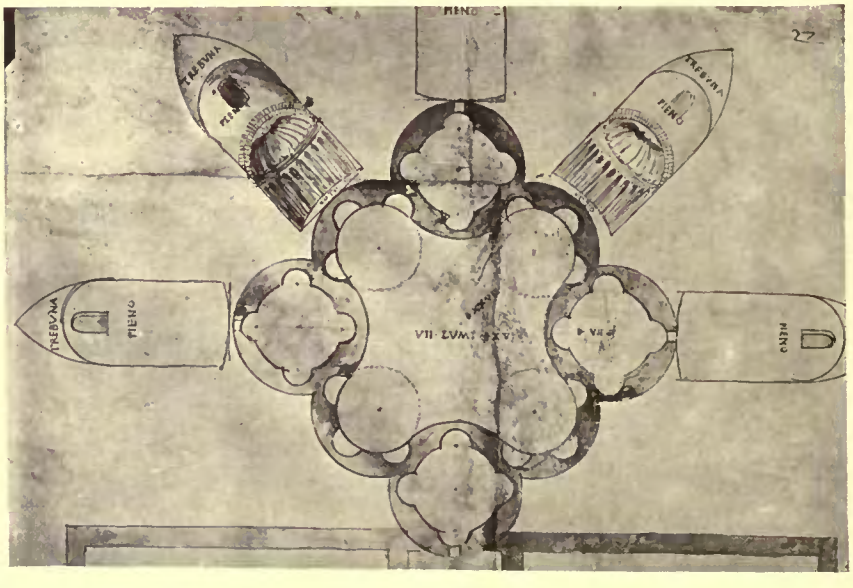


Fig. 403.—Baiae. Group of Thermal Buildings (IInd Century).

Another example of a segmented cupola is the hemispherical vault of the Serapeum in Hadrian's Villa at Tivoli, from which the architect of SS. Sergius and

Bacchus at Constantinople derived his inspiration. We find it again in the dome of the octagonal vestibule (Fig. 402) in the so-called "Piazza d'Oro" of the Villa. Again, a group of circular thermal buildings at Baiae (IInd century), preserved in Sangallo's Vatican sketch-book, had segmented domes (Fig. 403). The form appears again in the half-dome at the end of a hall close to the circular mausoleum in the Villa of the Gordians (IIIrd century) on the Via Praenestina near Rome. And in one of Rossini's views[1] may be noticed a round building called by him "Tempio di Venere Sallustiana," with a similar cupola.

In the Byzantine world the earliest example of a dome with continuous concave segments (*i.e.* not alternating with flat bands as in SS. Sergius and Bacchus) with which I am acquainted, is the one in the convent church of Myrelaion, also at Constantinople (919–945).

Fig. 404.—Part of elevation of wall in a Roman Bath. (*From a sketch by G. B. Sangallo in the Uffizi.*)

The second characteristic is that of the two tiers of shafts which decorate the apses. This motive was suggested by the two tiers of columns sometimes employed by the Roman architects in the decorative treatment of walls in their Thermae (Fig. 404). We have not found it applied to apses before its appearance in this chapel at Grenoble.

Fig. 405.—Flavigny. Crypt of the old abbey church (755–768).

CRYPT OF THE ABBEY CHURCH OF FLAVIGNY.—The abbey of Flavigny in the Duchy of Burgundy, which in 1626, as Robert says,[2] lay "... ruinis et ruderibus pene sepultum," was, according to the same authority, founded about the year 606. Ansart,[3] on the other hand, states that the date of its foundation is not known. In the next place, Courtépée[4] cautiously remarks that the foundation with its dedi-

[1] *I sette colli di Roma antica e moderna.*

[2] *Gallia Christiana.*

[3] *De Sainte Reine d'Alise et de l'abbaye de Flavigny.*

[4] *Description générale et particulière au duché de Bourgogne.*

cation to St. Praejectus, bishop of Clermont, cannot have taken place till after his martyrdom at Volvie, which happened in 674.[1] Mabillon[2] puts it exactly in the year 722; while Plancher[3] fixes it in the time of Theuderich IV (720–737).

Whatever may be the truth, the translation of the relics of St. Praejectus from Volvie to Flavigny, and the erection of the church under his patronage, did not take place till the time of Abbot Manasses (755–788) and King Pippin (753–768).[4][5] According to Hugh of Flavigny it was in 880 that the consecration of the church was performed by Pope John VIII (872–882). This function must be connected with the translation to Flavigny in 864 of the body of Sainte Reine d'Alise,[6] and with the alterations or rebuilding carried out in the church.

Fig. 406.—Flavigny. Abbey church. Remains of the choir (XIth Century).

It does not appear that the building was destroyed by the Normans in their raid of 887 mentioned by the annalist Hugh. In the course of the XIIIth century it was rebuilt in the Pointed style, though the old sanctuary and the parts connected with it were preserved. In the XVIIth and XVIIIth centuries far reaching restorations and alterations were carried out. In the last century it was deserted, and fell into ruin. The materials were carried away, and the only parts preserved were the crypt with a corridor flanking it, a portion of the sanctuary, and a few arches of the nave.[7]

The only part of the original church standing is the crypt (Fig. 405), popularly known as the prison of Sainte Reine. The passage flanking it on the south, and, above ground, the remains of the choir with open and blank arcades, one above the other (Fig. 406), which were also preserved in the rebuilding of the XIIIth century, are work of a later date, as is shown by the masonry and the carving. This date may very well be the second half of the XIth century, as is suggested;[8] and then the new works will have followed on the reform effected by King Robert (996–1031) in 1025 or 1026.[9] Belonging to the isolated columns in the crypt there

[1] Mabillon, *Acta Sanct. Ord. S. Benedicti.—Vita s. Praejecti episcopi Arvernensis et martyris.*
[2] *Annales Ord. S. Benedicti.*
[3] *Op. cit.*
[4] Migne, *Patr. Lat.*, Vol. 154.—*Hugonis abbatis Flaviniacensis chronicon.*
[5] Robert, *Gallia Christiana.*
[6] Migne, *Patr. Lat.*, Vol. 154.—*Hugonis abbatis Flaviniacensis chronicon.*
[7] Bordet et Galimard, *Restes de l'ancienne basilique de l'abbaye bénédictine de Flavigny.*
[8] Bordet et Galimard, *op. cit.*
[9] Delisle, *Roberti regis diplomata.*

still survive three of the original Pre-Lombardic cubical capitals, of even ruder character than those in the crypt of Saint Laurent at Grenoble.

Some would have it that the crypt was rebuilt or restored in the XIth and XIIth centuries. This view is quite untenable. The vaulting and the outer wall are manifestly of the same date, and the capitals, with their abaci, have been made on purpose to fit the vaulting; so that piers, vaulting capitals, and abaci form a single architectural whole of one date. Moreover, the remarkable rudeness of the vault construction would ill agree with the quality of French masonry in the IXth and Xth centuries, not to say that of the XIth and XIIth. The capitals, again, whether on account of their form or the rudeness of the execution, cannot by any means be ascribed to the time of the successors of Charles the Great, and still less to a later period. Lastly, the occurrence on two of the capitals of the letter M, believed to be the initial of Manasses the Great (755–788), the builder of the crypt,[1] is another piece of evidence which confirms the date of the building.

The crypt of Flavigny, or so much of it as is left, is that erected on the occasion of the translation of the relics of St. Praejectus (755), and was the necessary consequence of that event; for crypts were constructed with the special object of containing the bodies of saints.

It is the oldest dated building in France exhibiting Pre-Lombardic cubical capitals. These are earlier than the examples in the church of Germigny des Prés (801–806). The importation of the type into these regions was perhaps one of the results of Pippin's descents on Italy. The conquest of the Lombard kingdom by Charles the Great did the rest, and the form spread all over his Empire. It is a Comacine creation of the second half of the VIIth century. Before that time capitals of this type were not produced. At the most, and then only very rarely, they were used in a decorative way, like those for instance (to which I am the first to call attention) to be seen in the representation of a temple on a Phoenician stone carving from Carthage in the Semitic Room at the British Museum (Fig. 407).

Fig. 407.—British Museum. Phoenician carving.

In the next place, the intersecting vaulting of the crypt, with the vaulting arches incorporated in it, shows that the device of visible arches, which had long been practised by the builders of Rome, Ravenna, and Constantinople, was not yet followed in France.

THE CHAPEL OF SAINTE BLANDINE IN SAINT MARTIN D'AINAY AT LYONS.—With regard to the monastery of Ainay at Lyons we are told by Mabillon[2] that Queen Brunhildis (566–613) restored an earlier one known by the name of Interamnis, founded in the Vth century by Romanus abbot of Condat († 460). Choppin,[3] how-

[1] Bordet et Galimard, *op. cit.* [2] *Annales Ord. S. Benedicti.* [3] *Monasticon.*

ever, says that it was erected by Brunhildis in 612, and afterwards destroyed by the Hungarians; while Robert[1] only states that the queen was the foundress of the monastery at Ainay dedicated to St. Martin. Additional information is given by Mabillon,[2] [3] who relates that it was restored by the abbot Aurelian, afterwards archbishop of Lyons (875–876–895). And Robert[4] states that Abbot Amblard, who also became archbishop (957–978), rebuilt it in consequence of the damage done by the Hungarians in 937.[5]

Fig. 408.—Lyons. Saint Martin d'Ainay. Chapel of Sainte Blandine (about 966).

It is to this last renewal, which took place about 966, that the existing chapel of Sainte Blandine belongs.[6] Recent restorations have revealed the existence of work of two dates. In the oldest, that at the end of the building, the mortar contains pounded pottery, while in other parts it is made with sand from the bed of the Rhone. The former will belong to the work of Aurelian, while the large blocks of stone in the front of the existing church of Saint Martin may come from the building of Brunhildis.

The existing church is the result of rebuilding by Abbot Gaucerannus in 1102,[7] consecrated by Pope Paschal II in 1107.[8] Later it was altered by the addition of outer aisles and a dome; by the substitution of sham barrel vaulting for the original wooden ceiling; and by the conversion of the three round-headed doorways of the west front into entrances with pointed arches.

The chapel of Sainte Blandine is of rectangular plan, with a sanctuary of similar form (Fig. 408). Two columns are inserted in the angles of the frontal arch of this sanctuary, while its side walls are decorated with blank arcading springing from columns. All these columns have Pre-Lombardic cubical capitals, which tell us that this type, introduced into France in the time of Pippin, was still the fashion in the southern parts of the country in the Xth century.

[1] *Gallia Christiana.*
[2] *Acta Sanct. Ord. S. Benedicti.—S. Aureliani episcopi Lugdunensis elogium historicum.*
[3] *Annales Ord. S. Benedicti.* *Gallia Christiana.*
[5] *Annales Ord. S. Benedicti.* [6] Martin, *Histoire des églises et chapelles de Lyon.*
[7] Sammarthanus, &c., *Gallia Christiana—Ecclesia Lugdunensis—Athanaeum.*
[8] Jaffé, *Regesta pontificum romanorum.*

CHAPTER II

THE LOMBARDO-NORMAN STYLE IN NORMANDY

THE foundations of the new church of Saint Bénigne at Dijon had scarcely been laid when Richard II, Duke of Normandy (996–1026), invited William of Volpiano to come to Fécamp and reform the abbey of the Trinity. The latter, remembering the negative results of a previous attempt by Majolus the abbot of Cluny (948–994), at first tried to avoid the duty, on the ground of the barbarous and savage character of the Norman dukes, who were more inclined to destroy than to build churches, and more likely to drive monks away than gather them together in monasteries.[1] But at last, in consequence of a fresh and urgent entreaty, he gave way, and started on his mission.

At the dawn of the XIth century Normandy was no longer in the miserable conditions which had prevailed during the period between the settlement, in the days of Louis the Pious (814–840), of the sea-kings' hordes on the island of Noirmoutier, the centre from which they started, plundering, burning, slaughtering, in every direction, and the treaty of Saint Clair sur Epte. By that treaty Charles the Simple (893–929) assured to Rollo (911–931) the possession of Rouen and the lower valley of the Seine, from the Epte to the sea. And though we have no documentary information about the early days of the Norman dukedom, founded in 911 or perhaps not till 921, still, we know that, after the Normans had obtained a foothold and given the country their name, an epoch of depredation and ruin was succeeded by one of security and internal development.

It is also certain that, with the accession of Richard II, and after the peasant revolt had been crushed by Rudolf, Count of Evreux (997), in the manner described by William of Jumièges,[2] the country had become so strong internally that it felt itself capable of engaging in a series of expeditions against other territories, which culminated in the conquest of England. Moreover, what is known about Richard is far from confirming the charges brought by William against the Norman princes; so that we must suppose, either that these were instigated by the desire of putting Richard's intentions to the proof, and obtaining his support in all things necessary, or else were based on the low opinion he had of the religious sincerity of the dukes. The latter point was not devoid of some element of truth, at any rate in the case of the improvised Christianity of Rollo, or the skin-deep faith of Richard I "the Fearless" (943–996).

There is, indeed, some discrepancy in the accounts given by the chronicles of the

[1] Mabillon, *Acta Sanct. Ord. S. Benedicti.—Vita s. Guillelmi abbatis.—Excerpta ex libro de revelatione, aedificatione, et auctoritate monasterii Fiscamnensis.*

[2] Duchesne, *Historiae Normannorum scriptores antiqui—Historia Normannorum.*

conduct of Rollo the Rover after his baptism (912) by Franco, archbishop of Rouen; so that, while we read in Ademar[1] that, on the one hand, he sacrificed his Christian prisoners to the Scandinavian idols, and, on the other, made donations to churches ("Christianos captvos centum ante se decollari fecit in honore quae coluerat idolorum, et demum centum auri libras per ecclesias distribuit Christianorum in honore veri Dei"), Dudo of Saint Quentin,[2] on the contrary, tells us that he was a good and pious ruler, and a protector of the Church. All the same, there is good reason for thinking that at the bottom of his heart he remained the pagan he was before baptism ("idolisque contemptis, quibus ante deservierat").[3] And with regard to sacred buildings, if Rollo gave largely to the churches of Rouen, Evreux, Bayeux, Jumièges, Mont Saint Michel, and Saint Denis, at his baptism, as we are told by Dudo and William of Jumièges, he does not seem to have undertaken any general restoration of the churches destroyed during the wars, as these chroniclers would have us believe ("templa frequentia paganorum destructa restauravit"), seeing that one of them, Jumièges, was, with the adjoining monastery, still a heap of ruins in the days of William I "Longsword" (931–943). Again, in the case of Richard I (943–996), though the "Benedictine Annals" and the two historians just referred to mention sundry religious buildings as restored or founded by him, on the other hand we know that, on the occasion of the invasion of Normandy by King Sihtric (943), when a large number of Normans headed by Thurmod returned to paganism, he followed their example. This sudden relapse, which may find an excuse in the duke's youth, is confirmed by the clear testimony of Flodoard.[4]

However this may be, William of Volpiano, immediately on his arrival at Fécamp and institution as abbot, took in hand the reformation of that and other monasteries (*e.g.* Jumièges, Mont Saint Michel, and Saint Ouen at Rouen), founded new ones, restored or rebuilt the old ones, and was in every case made their superior. The virtues and enterprise of the new abbot of Fécamp and his assistants speedily fanned into flame a real religious revival which made its influence felt in every direction. This revival, the result of a movement which is natural to peoples in an elementary stage of culture, was accompanied by an intellectual efflorescence produced by the establishment, in the abbeys subject to the supreme control and authority of William, of schools open to every class of society. The Benedictines were well aware that letters, aided by the arts, are one of the most effective weapons for fighting barbarism. In this way the abbeys became seats of public instruction; and this was especially the case at Fécamp, where William took a personal share in the work of education.

Having given this brief sketch of the conditions under which the work of William of Volpiano and his successors was begun, let us see what was the state of the arts of architecture and carving in Normandy in the century preceding the epoch of 1000.

Of the very rare ecclesiastical buildings erected by order of the Norman dukes of that period, the only one of which there are sufficient remains to provide material for study and observation is the old church of Saint Pierre at Jumièges (940).

The oldest portions of the church at Fécamp, viz. the chapels of St. Peter and St. Nicholas, and the round arches springing from continuous Lombardic capitals ornamented with scroll work and undercut foliage in the ambulatory of the existing

[1] *Mon. Germ. hist.—Ademarus—Historiarum libri IV a saec. V-1028.*
[2] Migne, *Patr. Lat.*, Vol. 141—*De moribus et actis primorum Normanniae ducum.*
[3] Le Prevost, *Orderici Vitalis historia ecclesiastica.*
[4] *Mon. Germ. hist.—Flodoardus, Annales.*

church in the Pointed style, have nothing to do with the church of the Trinity founded by Richard I in 990. Of that structure, with its nave and aisles, Dudo of Saint Quentin has left a brief but valuable description, in which he mentions the master builder who acted as its architect ("petrarum fabro architectoria arte perito"), and also the material of which it was constructed. The fragments just referred to must be assigned to the rebuilding carried out by William de Ros, third abbot of Fécamp (1087–1107), and described by Ordericus Vitalis. "Nam cancellum veteris Ecclesiae, quam Richardus Dux construxerat, deiecit, et eximiae pulchritudinis opere in melius renovavit, atque in longitudine ac latitudine decenter augmentavit. Navem quoque Basilicae, ubi Oratorium sancti Frodmundi habetur, eleganter auxit."[1]

Fig. 409.—Rouen. Apse of the old Saint Ouen (XIth and XIIth Centuries).

No trace remains of the rebuilding of the church of the Mother of God at Rouen, carried out in the days of Rollo, Duke Richard I, and Bishop Robert I (989–1037). Nor is anything preserved above ground of the reconstruction in the time of Archbishop Maurilius (1055–1067), who consecrated the new work in 1063. It is to a later date that we must assign the remains of piers and shafts under the pavement to the left of the presbytery of the present cathedral, which was begun after the fire of 1200.

The same may be said of the church of Saint Ouen, also at Rouen, founded under the invocation of SS. Peter and Paul by Archbishop Flavianus (533–542) in the reign of Clotaire I, the name being changed to Saint Ouen in the XIth century.[2] It was rebuilt, if not built, by the said duke according to Ordericus Vitalis and William of Jumièges. For the most ancient part of the present church, viz. the apse in two stories marked off on the outside by a billet course, each of which contains a window with angle shafts and Corinthianesque capitals, is not older than the rebuilding carried out between 1046 and 1126 (Fig. 409).

Fig. 410.—Jumièges. Church of Saint Pierre (about 940).

[1] *Op. cit.*

[2] Robert, *Gallia Christiana.*

CHURCH OF SAINT PIERRE AT JUMIÈGES.—It has been thought by some[1] that the relics of this church which survive belong to the first foundation (654) by St. Philibert with the aid of Chlodovech II (638–656) and his queen Bathildis. Really what we see is a rebuilding of the original structure (burned with the adjoining convent by Hasting in 851) carried out by Duke William I, it seems, in 940,[2] while Gonthardus was archbishop of Rouen (919–942). The greater part of it was destroyed to make way for the new construction of the XIVth century; and what was left was damaged in the XVIth, and finally reduced in the early years of the last century to the deplorable state in which it now appears.

Fig. 411.—Jumièges. Capital in church of Saint Pierre (about 940).

In the small surviving fragment of the original building, which had a nave and aisles (Fig. 410), two features are to be noticed. One is the triforium gallery, with groups of arches enclosed within a relieving arch after the Romano-Ravennate manner, thus confirming our idea as to the date of the building. It was an arrangement which did not become the fashion north of the Alps before the time of Charles the Great (768–814). The other is the presence of Pre-Lombardic cubical capitals (Fig. 411), which are another confirmation of that date. Very different were the capitals in vogue in the north of France in the VIIth century, and precisely in the time of Chlodovech II and Queen Bathildis, as the crypt of Jouarre (653) tells us.

The remains of Saint Pierre inform us how low was the standard of building in Normandy in the Xth century. Nor was this confined to the Duchy, but must also have prevailed in the adjoining districts, to judge by the remains of the old cathedral of Beauvais.

THE OLD CATHEDRAL OF BEAUVAIS is popularly known as the "Basse Œuvre." There are those who would take it back to Merovingian times (481–752), while others regard it as a work of the VIIIth or IXth century. A third view places it in the time of Bishop Hervé (987–997). It is this last date which

Fig. 412.—Angers. Remains of church of Saint Martin (1030).

[1] Loth, *Histoire de l'abbaye royale de Saint-Pierre de Jumièges.*

[2] Le Prevost.—*Orderici Vitalis historia ecclesiastica.*

suits it best, as Robert[1] shows; and it explains Viollet-le-Duc's[2] statement that the church was in existence in 990.

Of the original structure, mutilated when the new cathedral was built in the Pointed style (XIIIth century), there is preserved the front, and the first three bays of the nave and aisles. They have wooden roofs, and are separated by piers of octagonal or quadrangular section without capitals or impost mouldings. The octagonal ones are hollowed out on four sides in order to fit the springers of the arches. These piers are the precursors of the more elaborate ones still surviving in the ruins of Saint Martin at Angers (Fig. 412), which are fitted to their imposts by being hollowed out at the angles, each hollow being occupied by a coarse leaf. Saint Martin was rebuilt, with the assistance of Count Fulco III Nerra (1012–1040) and his wife Hildegarde, before the year 1020,[3] and dedicated by Hubert, bishop of Angers (1010–1047), in 1030.[4]

Fig. 413.—Beauvais. Old Cathedral (987-997).

In the old cathedral of Beauvais the window archivolts, with alternate voussoirs of stone and brick enclosed by a ring of bricks laid horizontally (Fig. 413), recall those at Agliate (824–860) and in the palace of Constantine VII Porphyrogenitus (912–958) at Constantinople (Fig. 414). The large window in the front, richly decorated with stars in low relief, is the result of an alteration (Fig. 415). Ornament of

Fig. 414.—Constantinople. Palace of Constantine Porphyrogenitus (912–958).

[1] *Gallia Christiana.*

[2] *Dictionnaire raisonné de l'architecture française du X^e au XVI^e siècle.*

[3] D'Espinay, *Notices archéologiques.*

[4] Gams, *op. cit.*

Fig. 415.—Beauvais. Old Cathedral. (987-997).

this kind was revived by the Lombardo-Roman style, which borrowed it from buildings of the Roman period.

* * *

We will now supplement our account of the two buildings just discussed by that of five others of an earlier date: the crypt of Jouarre (653), the baptistery of Poitiers (VIIth century), the church of Germigny des Prés (801–806), and the crypts of Saint Aignan (814–840) and Saint Avit (IXth century) at Orleans. We are thus provided with a group of buildings of the Merovingian (481–752) and Carolingian (752—987) ages which, with the addition of the three of the same periods described in the first chapter of the Second Part, and of Angilbert's basilica at Saint Riquier (Centula) (793–798) as preserved in a view in Mabillon,[1] may furnish us with typical examples which will enable us to form an idea, incomplete perhaps, but certain so far as it goes, of the state of ecclesiastical architecture in France at those periods and up to the epoch of 1000.

THE CRYPT OF THE CHURCH OF SAINT PAUL AT JOUARRE was built (653) by St. Ado, placed under the rule of St. Columban, and endowed by Queen Bathildis (649–680).[2][3] It exhibits work of three distinct dates. The first is that of the original foundation, and to this belongs the northern part of the structure with its Corinthianesque and Composite capitals (Fig. 416). To the second is to be ascribed the enlargement of the primitive crypt, represented by a chapel built against it, dedicated to St. Ebrigisilus, bishop of Meaux (VIIth or VIIIth century). This enlargement is to be connected with the translation of the relics of St. Potentianus to Jouarre (847).[4] As a matter of fact, a pulvin carved with foliage, recalling specimens in the abbey church of Mettlach (987–1000), and others in the small chapel under the south aisle of the Castle church of Quedlinburg (997–1021), may be assigned, on account of its form and the quality of the carving, to the Carolingian age, and in it to a period later than the reign of Charles the Great. To the third date belongs a final enlargement to the south-west, forming a pendant to the chapel referred to (Fig. 417). This event may be connected[5] with the installation in the XIth century of a chapter of secular canons which is mentioned

[1] *Acta Sanct. Ord. S. Benedicti—Vita s. Angilberti abb. Centulensis, auctore Hariulfo.*
[2] *Mon. Germ. hist.—Vita sanctae Balthildis.*
[3] Delisle, *Aimoni monachi Floriacensis, De gestis regum Francorum.*
[4] Mabillon, *Acta Sanct. Ord. S. Benedicti—De translatione sancti Potentiani in coenobium Jotrense.*
[5] Enlart, *Manuel d'archéologie française depuis les temps mérovingiens jusqu'à la Renaissance.*

by Mabillon.[1] This date suits the Lombardic capitals, some of them having figures, a result of the Lombardo-Norman influence in art which made itself felt after the epoch of 1000. Earlier than this, Lombardic figure capitals are not to be found in France. From the Merovingian age onwards the only dated French figure capital that I can point to is the one to which I have already called attention in the crypt of Saint Pierre de la Couture at Le Mans (997).

On the one hand, the carved heads on the capitals at Jouarre are, to judge by the one which is well preserved, poor work, and earlier than the XIIth century; but, on the other hand, a date not before the XIth century is disclosed by the Attic

Fig. 416.—Jouarre. Original Crypt in the church of Saint Paul (653).

spurred bases in this part of the crypt, for this Lombardic motive did not cross the Alps till about the middle of that century.

This third phase was accompanied by a general alteration of the building, and by the construction of the unraised cross vaulting. For the vaults belonging to the XIth century building are evidently made to fit the supports, and those of the VIIth century in the crypt are of just the same character. Moreover, the cross vaulting in the crypt of Saint Pierre at Flavigny tells us that in France, during the Dark Ages, cross vaulting was of the continuous type, and not supported by visible arches, as at Jouarre. I should mention here that Rohault de Fleury[2] thinks that the first church had only a flat roof, and that the vaulting was added in the Xth or XIth century.

The most important things in the crypt are the Merovingian capitals. They display an artistic quality which one would look for in vain in Italian Lombardic capitals of the VIIth century, and can only be compared (making allowance for the difference of type) with the contemporary productions of the School of Ravenna. Another noteworthy object is the shrine of St. Theodechildis, the original parts of which have

[1] *Annales Ord. S. Benedicti.*

[2] *La Messe, études archéologiques sur ses monuments.*

Fig. 417—Jouarre. Additions to original Crypt of Saint Paul (IXth and XIth Centuries).

carvings of scroll work with grapes, roses, lilies, and scallop shells, the whole finely executed.

This revival of art in France in the VIIth century is not difficult to understand when we remember the assistance it received in the form of the foundation and endowment of ecclesiastical institutions by a whole series of royal personages, from the pious Radegund (538–587) to the great but unfortunate Brunhildis (566–613). It was the latter who protected the mission sent by Pope Gregory I to convert England, and she was so important a patroness of architecture that a large number of buildings with which she had no connection were ascribed to her.[1] And the series goes on from her to Sigibert III (638–650), and the virtuous and capable Bathildis.

THE BAPTISTERY OF SAINT JEAN AT POITIERS was erected over a Gallo-Roman sepulchral edifice. It consists of two parts, the baptistery proper, and the narthex. The plan is an oblong, with apses projecting from the three free sides (Fig. 418). The roof is of wood, except in the case of the two subordinate apses to the north and south. The principle apse, and the north, south, and east walls of the body of the building, are decorated internally with arcading. On the outside it is ornamented with small pilasters, round and triangular pediments, &c. (Fig. 419).

The front and the narthex were probably rebuilt after the conflagration which devastated Poitiers in 1018.[2] Traces of fire may still be seen in the building.

With regard to this most interesting of the earliest French churches we are entirely without authentic documentary evidence for fixing the date of its construction. The most likely date appears to be the time of Bishop Ansoald (682–696),[3] one of the most important holders of the see. Structural works are generally to be connected with characters capable of large undertakings, and Ansoald was one of the most notable bishops of Poitiers.

The presence of capitals brought from elsewhere, which, though more bevelled, recall by their nearly equal rudeness those in the chapel of Saint Laurent at Grenoble,

[1] *Mon. Germ. hist.—Annales Wormatienses.* [2] *Mon. Germ. hist.—Ex chronico Ademari Cabanensis.*
[3] De la Croix, *Étude sommaire du baptistère Saint-Jean de Poitiers.*

Fig. 418.—Poitiers. Baptistery of Saint Jean (VIIth, XIth, and XIIIth Centuries.)

Fig. 419.—Poitiers. Baptistery of Saint Jean (VIIth, XIth, and XIIIth Centuries).

and may well date from the long and prosperous reign of Theodoric the Visigoth (449–451), fixes the erection of the baptistery in Merovingian times. Now, in that period, the most favourable moment for its construction was certainly the time of Radegund; yet there is no mention of the event, which, considering the purpose of the building, would be an important one, either by Venantius Fortunatus[1] who was intimate with her, and was afterwards bishop of Poitiers (599–600), or by the nun Baudonivia,[2] or by their contemporary, Gregory of Tours (573–595). So that we are obliged to ascribe it to a later date, viz. the VIIth century, in which the period that suits it best is the episcopate of Ansoald.

The most notable features of the baptistery of Poitiers are its architectural decoration, both internal and external; the triple frontal arch of the principal apse; the blank arcading in the apse, which leads the way for that in the church of Germigny des Prés (801–806) and the chapel of Sainte Blandine at Lyons (966); and, lastly, the triangular-headed arches and pediments, like the apertures in a dove-cot.

THE CRYPT OF THE CHURCH OF SAINT AIGNAN AT ORLEANS.—The crypt beneath the choir of the present church of Saint Aignan exhibits in its oldest parts the remains of a structure which may be referred to the time of the Emperor Louis the Pious (814–840), and was the result of a visit paid by him to the place,[3] and also to the rebuilding of the church by King Robert, the dedication taking place in 1029[4] (Fig. 420).

Fig. 420.—Orleans. Saint Aignan. Crypt (IXth and XIth Centuries).

To the IXth century belong the wall-arches on the north and south, the cubical capitals of which, as being artistically inferior to the original ones of the same form in Theodulf's church at Germigny des Prés, must be dated later than the first years of that century.

To the beginning of the XIth century belong the two capitals (one with foliage, the other with figures) on the half-columns in the west wall. They are rudely executed, especially the one with figures.

THE CHURCH OF GERMIGNY DES PRÉS was erected by Theodulf, abbot of Fleury and bishop of Orleans (788–821), between 801 and

[1] *Mon. Germ. hist.—De vita sanctae Radegundis.*
[2] *Mon. Germ. hist.—Vita Radegundis reginae Francorum.*
[3] Delisle, *Ermoldus Nigellus—Carmen elegiacum de rebus gestis Ludovici Pii.*
[4] Id., *Helgaldus—Epitome vitae Roberti regis.*

internal adornment of the church (I am speaking of those that are original, for the modern ones are devoid of the characteristic stamp of the cubical capitals of the time of Charles the Great), and also by the narrow double-splayed windows in the eastern apse, and the still narrower slits in the other parts of the church, except the dome where the windows are fairly large. Both of these features are characteristic of the contemporary School of Lombardy.

Fig. 423.—Germigny des Prés. Church (801–806).

More evidence is to be found in the capitals of the shafts belonging to the sanctuary arch, the arcading round the apse, the triple window openings in the central space, &c., all displaying the Pre-Lombardic manner of the VIIIth and IXth centuries. Among these capitals, the old ones still preserved, and the casts taken of the others before they were re-worked, suggest a Lombard hand. Unless, indeed, some French carver had learned to handle his chisel in Comacine fashion, after the introduction of the Pre-Lombardic cubical capital in the crypt of Flavigny (755–768)

origin, but an Italian by birth ("erat Theodulfus natione Italus"[1]), procured from Italy the craftsmen qualified to erect and decorate the church which was his pleasure

Fig. 422.—Germigny des Prés. Church (801–806).

and his pride. These craftsmen must, of course, have had French assistants. This idea is confirmed by the capitals, clumsy adaptations of Corinthian, used in the

[1] Mabillon, *Annales Ord. S. Benedicti.*

internal adornment of the church (I am speaking of those that are original, for the modern ones are devoid of the characteristic stamp of the cubical capitals of the time of Charles the Great), and also by the narrow double-splayed windows in the eastern apse, and the still narrower slits in the other parts of the church, except the dome where the windows are fairly large. Both of these features are characteristic of the contemporary School of Lombardy.

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where, as some think, it was due to imitation of foreign models, or actually to the work of Comacine masters.[1]

Again, there are the remains of the mosaics in the half-dome of the principal apse, which are believed to be original.[2] We must remember that when Theodulf's church was erected, mosaic work still maintained a position of some importance in Italy, as is shown by the precious examples in the Roman basilicas of Santa Cecilia, Santa Maria in Domnica, and Santa Prassede, all put up by Pope Paschal I (817–824), and as would be illustrated, had they survived, by the mosaics, probably the work of artists from Ravenna, with which not a few sumptuous structures of the Lombard age were originally decorated.

Fig. 424.—Rome. Villa Mattei. Detail from sarcophagus (IIIrd or IVth Century).

Then there is the arcading which decks the interior of the sanctuary apse (Fig. 423), an arrangement perhaps derived from the pairs of arcades in the sanctuary of the baptistery at Poitiers (VIIth century), which in their turn may have come from the arcading round the apse of San Giovanni Evangelista at Ravenna (425).

Lastly, there are the pairs of decorative angle shafts in the sanctuary arch, a feature taken from the chapel (now crypt) of Saint Laurent at Grenoble (VIth century), where it was employed just about the time when the architect of the basilica at Kalb-Lauzeh (VIth century) was springing the outer archivolt of his chancel arch from shafts supported by brackets.

But though we may infer that Theodulf's basilica was raised by the combined efforts of Italian and French workmen, we may also be allowed to believe that it was carried out under the advice of an architect from the East, perhaps the one who designed the chapel at Aachen in accordance with the wishes of Charles the Great. This would explain the presence of domes and barrel vaults in the church, and also the feature of horse-shoe arches. For though recesses of this form occur (sporadically) in the ruins of the villa known as the "Sette Bassi" on the Via Latina near Rome (IInd century), the type came from the East. I may notice that the sides of a sarcophagus in Sant' Apollinare in Classe (not earlier than the second half of the VIIIth century, owing to the motive of branches ending in leaves joined at the centre of each group by a boss so as to form a sort of series of wheels: a motive which does not appear in Italy before that time) afford an early

[1] Bordet et Galimard, *op. cit.*

[2] Prévost, *op. cit.*

decorative example of horse-shoe arches for Italy and the lands beyond the Alps. The oldest instance in the West is furnished by the well-known sarcophagus in the grounds of the Villa Mattei on the Celian at Rome (IIIrd or IVth century), the sides of which have arcades with arches larger than semicircles (Fig. 424).

THE CRYPT OF SAINT AVIT AT ORLEANS.—This is a miniature basilica, with nave and aisles divided by four octagonal piers surmounted by polygonal capitals chamfered at the angles. The vaulting has been reconstructed (Fig. 425). It is reached through an ante-crypt with intersecting vaulting springing from two cylindrical columns with capitals in the same style as those just mentioned.

The history of this structure is not known. Some think that it belongs to the days of Childebert I (511–558), others that it is of the Carolingian period. With this latter view I am in agreement, and the most probable date will be the reign of Charles the Fat (881–887), and later than the crypt of Saint Aignan, inasmuch as the art displayed in the mouldings in Saint Avit is more decadent than that of the capitals of the latter.

Fig. 425.—Orleans. Crypt of Saint Avit (IXth Century).

Let us now proceed to review the distinguishing characteristics of the French ecclesiastical buildings of Merovingian or pre-Merovingian and Carolingian times.

I. Up to the time of Charles the Great (768–814) chapels were covered with barrel vaulting, while structures of larger size, such as aisled basilicas, had timbered roofs. Thus, barrel vaults occur in the chapel of Saint Laurent at Grenoble (VIth century), and in the oldest part of the chapel of St. John Baptist in Saint Bénigne at Dijon, going back to an earlier period than the IXth century, and possibly even belonging to the age of Gregory, bishop of Langres (507–539).[1] For though the vaulting of the chapel at Grenoble has been restored, and that of the one at Dijon rebuilt, its form was not altered in either case.

On the other hand, to take a few instances, there were wooden ceilings in the basilicas of St. Martin at Tours as erected by Bishop Perpetuus (460–490), and of SS. Peter and Paul, also founded by him there.[2] The same was the case with the church built by St. Namatius (446–462) at Clermont;[3] and with that of Holy Cross and St. Vincent (Saint Germain des Prés) at Paris, erected by King Childebert (511–558), and consecrated in 558 by St. Germanus, which was of cruciform plan and

[1] [2] [3] *Mon. Germ. hist.—Gregorii episcopi Turonensis historia Francorum.*

had its roof sheeted with gilded copper.[1] Again, the baptistery of Saint Jean at Poitiers (VIIth century), not excepting the sanctuary, had, apparently, a wooden roof; for when the scheme of painting was carried out in the XIIth century, the decoration was confined to the side walls, whereas in the redecoration of the following century the paintings extended over the vaulting, so that we must infer that the latter was not in existence in the XIIth century.

In all these wooden-roofed buildings the apse must be excepted. Apart from one here and there, of more complex form, and presenting greater difficulties in construction, like the eastern apse of the baptistery at Poitiers, they must have been covered by half-domes in masonry, though Gregory of Tours never mentions such.

The lantern-tower over the crossing, where there was one, must also have had a wooden roof. Gregory, in fact, says in his account of the destruction of the tower over the altar of the basilica of St. Antolianus at Clermont, that the operation began with the removal of the timbers of the roof: "iussit tegnos asseresque vel tegulas amoveri."[2]

The crypts mentioned by him are described as vaulted. The one at Dijon stands for all. Later, those of basilica form, of the age of Pippin (752–768), had continuous unraised cross vaulting springing from isolated supports or wall shafts, after the manner seen in the crypt of Saint Pierre at Flavigny (755–768).

In the reign of Charles the Great, churches of central plan, as his palace chapels appear to have been generally, were vaulted, as we see at Germigny des Prés; while those of basilica plan had wooden roofs over nave and aisles. The abbey church of Saint Riquier, built by Angilbert between 793 and 798 ("fulgentissima ecclesia, omnibusque illius temporis ecclesiis praestantissima"[3]), was supported by columns brought from Rome, and had a wooden roof, which accounts for its destruction in 1131.

The two large round towers of this church, one in front of the apse, the other between the church and its vestibule, had imbricated wooden roofs with an opening at the top, over which rose light structures, also of wood, in three stages with corresponding roofs. An identical tower, but of smaller dimensions, stood beside the adjacent church of St. Mary, also built by Angilbert, as may be seen in the priceless view of the monastery of Centula, preserved for us by Mabillon[4] (Fig. 426). This type of very lofty towers with wooden spires, passing from an interior square base into a circular form on the exterior, is of Frankish origin. Venantius Fortunatus,[5] describing the new cathedral of Nantes, erected by Bishop Felix (552–582) about the year 570, mentions a tower-like structure, square below and round above, rising to a point, and soaring into the air with a series of arcaded stories:

"*In medium turritus apex super ardua tendit*
Quadratumque levans crista rotundat opus.
Altius, ut stupeas, arce ascendente per arcus
Instar montis agens aedis acumen habet"

Cross vaulting continued to be without visible transverse arches, as is proved by that of the ground floor of the Palatine Chapel at Aachen (796–804)—not indeed a French building, but the most famous structure of its time. Such arches do appear in the upper story, but in connection with barrel vaults and vault cells.

[1] Mabillon, *Acta Sanct. Ord. S. Benedicti—Vita s. Droctovei abbatis basilicae S. Vincenti in suburbio.*
[2] *Mon. Germ. hist.—Historia Francorum.*
[3] D'Achery, *Spicilegium—Chronicon Hariulfi monachi S. Richarii Centulensis.*
[4] *Acta Sanct. Ord. S. Benedicti—Vita s. Angilberti abbatis Centulensis.*
[5] *Mon. Germ. hist.—Venantius Fortunatus, Carmina.*

After the time of Charles the Great the practice of vaulting only the sanctuary continued. The first of the two chambers forming the chapel of St. John Baptist in Saint Bénigne at Dijon (IXth century) has an unraised intersecting vault. The chapel, too, of Sainte Blandine at Lyons (about 966) was given an unbroken barrel vault. Basilicas also still had wooden roofs. The abbey church of St. Gall (822–829) (outside France like the rotunda at Aachen), which was a colonnaded basilica, had a roof of this nature.

It was only after the advent of the Capets (987) that aisles of churches were occasionally vaulted. Thus, for instance, while the old cathedral of Beauvais (987–997) had its nave and aisles roofed with timber, the church of Saint Front at Périgueux, founded later than the year 988, had a wooden roof over the nave, but ramping barrel vaults in the aisles.

It is true that it has been suggested that the abbey church of Saint Pierre de la Couture at Le Mans had a cross-vaulted ambulatory with radiating chapels. The rebuilding of this church is chronicled by Mabillon under the year 997 [1] at the hands of Abbot Gauzbert I (990–1007) (apparently in consequence of a donation by Hugo Count of Le Mans in 990 [2]), replacing the older church erected by Bishop Bertram (587–623), and still standing in 996 when Bishop Segenfrid of Bellème (971–996) was buried in it.[3] But the oldest parts of the church of "La Couture" must be subjected to a fresh examination, for the only fragment of the rebuilding of 997 which survives is the crypt, and that is no longer in its original condition.

Fig. 426.—Saint Riquier (Centula). View of the Churches (793–798). (*From the "Acta Sanct. Ord. S. Benedicti."*)

Whether the works begun by Gauzbert I were interrupted, and then resumed with a fresh architectural design by his successor Ingelbaud (1010); or whether, at a later date, the choir above the crypt was pulled down in order to rebuild it with an ambulatory and radiating chapels, it is impossible to say. It is certain, however, that the shafts barely touching the outer walls of the crypt, with their stilted arches,

[1] *Annales Ord. S. Benedicti.* [2] Delisle, *Ex actibus pontificum Cenomannensium.*
[3] *Cartulaire des abbayes de Saint-Pierre de la Couture et Saint-Pierre de Solesmes.*

are a later addition. The capitals, too, belonging to similar shafts and to the corresponding half-wall-piers, are different from the others in the crypt, and must have been set up in the second quarter of the XIth century, and that will be the date of the remodelled ambulatory with its ring of chapels: a date, in other words, later than that of the original capitals in the crypt and in the abbey church of Notre Dame de la Charité or "du Ronceray" at Angers, founded by Fulco III Nerra (1012–1040) and his wife Hildegarde, and consecrated in 1028. And we say this while taking into account the absence of extreme archaic character in the animal figures in the ambulatory of "La Couture" compared with those in "La Charité." These latter, being original, exhibit foliage, birds, quadrupeds either in pairs facing one another in a threatening manner (Fig. 427) or engaged in throttling a dove, human figures in a circle holding hands, a man into whose ear the Holy Spirit whispers in the form of a dove, the Flight into Egypt. The representation of the living beings reveals a lower stage of art than that of the contemporary capitals in San Flaviano at Montefiascone.

Fig. 427.—Angers. Church of Notre Dame de la Charité. Capital (1028).

We may observe here that the crypt of Saint Martin au Val at Chartres belongs in our opinion to almost the same date, viz. the episcopate of the celebrated Fulbert (1007–1029). The church itself was destroyed by the Normans in 911, and again by Duke Richard I (943–996) in 965.[1] As a matter of fact, its Lombardic capitals belong to the first quarter of the XIth century, with the exception of one here and there of the Merovingian age, which has been utilized: *e.g.* a Composite capital with handles, recalling another of the same kind in the crypt of Saint Paul at Jouarre (653).

II. The buildings of the Merovingian age illustrate a whole new Grammar of Ornament. One fresh motive is that of shafts placed one above the other to decorate the sanctuary arch, in the manner we noticed in the chapel of Saint Laurent at Grenoble (VIth century). Entirely new, again, are the coupled blank arcades in the sanctuary of the baptistery of Poitiers (VIIth century), which were the model for the continuous arcades of the principal apse in Theodulf's church at Germigny des Prés (801–806), and the variant in the apse of the chapel of Sainte Blandine at Lyons (about 966). Original, too, is the form of the triple arch enclosing the frontal arch of the principal apse of the baptistery just mentioned. Of quite new design and conception are the two blank arches with a triangular-headed one between them, suggested by the colonnades of alternate arches and pediments, or arches, architraves, and pediments, which sometimes decorate the fronts of sarcophagi belonging to the first Christian centuries (Fig. 428), and also tombstones.[2] Possibly this architectural and decorative pediment design of the baptistery at Poitiers may have given suggestions to the French builders of the epoch of 1000; unless, indeed, they got the idea from some structure of the Gallo-Roman age, for the Romans were acquainted with the motive of a series of isolated or continuous pediments, as we saw in our account of San Giovanni Evangelista at Ravenna. In the same way, the design of blank triangular-headed arcading may have given the idea to the German builders of the IXth century.

In Italy, where the round arch has always been in favour, and has formed the

[1] Clerval, *Chartres—Sa cathédrale—Ses monuments.*

[2] Ramsay, *The Cities of St. Paul.*

basis of all the chief architectural styles, examples of this motive are very rare in mediaeval buildings, and have only a secondary importance.

In France the pediment motive may be seen employed on the exterior of the nave of the church at Saint Généroux, of the origin or history of which nothing is known, though some think that it was built before the Norman invasions, while others, with Gailhabaud,[1] believe that it probably belongs to the reign of Charles the Bald (843–877). I should place it, approximately, in the last years of the Xth or the first of the XIth century, on the grounds suggested by Choisy[2] and by Dehio and Von Bezold.[3] In any case it is certain that it is not earlier than the reign of Louis III the Saxon (876–882). In the time of Charles the Great (768–814) and Louis the Pious (814–840) ecclesiastical buildings had no external architectural ornament, and decoration was confined to the interior. Thus, the exterior of the rotunda at Aachen is plain, with the exception of the drum of the dome, where the

Fig. 428.—Rome. Sarcophagus in the Lateran Museum (IVth Century).

angle buttresses form part of the construction. And the exteriors of the original church at Saint Riquier (Centula), and of the existing ones at Germigny des Prés and Steinbach near Michelstadt (815–819), and of the sepulchral rotunda at Fulda (818–822), were equally unadorned. North of the Alps the first building exhibiting a scheme of architectural decoration on its outer face was the chapel at Lorsch (876–882).

Moreover, the presence of dentils, not of the ordinary oblong form, but cylindrical (*i.e.* billets), in the moulding which frames the windows and runs below the gables in the church at Saint Généroux, suggests a date which, though not the IXth century, when a decorative member of that form was unknown, is not far from the revival of art which dawned on France at the opening of the epoch of 1000. These billet mouldings were largely used in the exterior decoration of churches in the Lombardo-Norman style.

III. As late as the reign of Pippin (752–768) capitals were either Roman ones used over again, or else imitations of them so far as could be achieved in that more or less disturbed period. But under Pippin the Pre-Lombardic cubical capital came on the scene. This characteristic member, with or without chamfering of the lower

[1] *L'architecture du V^e au XVII^e siècle.* [2] *Histoire de l'architecture.* [3] *Ob. cit.*

part, the earliest Transalpine example of which exists in the crypt of Saint Pierre at Flavigny (755–768), soon became the fashion in France, and in the days of Charles the Great we find it in full possession at Germigny des Prés. It remained so all through the Xth century: the old church of Saint Pierre at Jumièges (940), and the chapel of Sainte Blandine in Saint Martin d'Ainay at Lyons (966), still contain capitals of the purest Pre-Lombardic type.

The typical Pre-Lombardic cubical capital in France before the epoch of 1000 was embellished with foliage, flowers, interlacing, cauliculi, but not human or animal figures, whether real or imaginary. For these the French had to wait till they were imported from Lombardy; and the first results of this importation we saw in Saint Bénigne at Dijon.

* * *

After this preliminary study we will now proceed to examine the few but important churches built from the designs of William of Volpiano or his pupils, and with their help to trace the gradual development of the Lombardo-Norman style which marked the revival of architecture in Normandy.

THE ABBEY CHURCH OF BERNAY was founded and dedicated to the Mother of God in 1013 by Judith (1008–1017) wife of Duke Richard II (996–1026). The convent was dependent on the abbey of Fécamp, and placed under the supreme authority of William of Volpiano. The work was completed by the duke, who gave the abbey a liberal endowment.[1]

With all its mutilations and alterations; reduced at one time to a barrack, and now permanently converted into a corn exchange, a fire-engine house, shops, a prison, &c.; partly concealed by structures which have grown up against it, this ill-starred Lombardo-Norman church still forms, in spite of the great difficulty of making an even incomplete examination of the structure, a very valuable piece of evidence, dealing as we are with the earliest known specimen of the Lombardo-Norman style in its infancy.

To begin with, it had the form of a perfect Latin cross ("crux immissa," in which the transept is not placed at the extremity of the upright limb but cuts it some way below the top), and was divided into nave and aisles which were continued east of the crossing. The nave ended in a semicircular apse. Each arm of the transept has an apse projecting from its eastern side.

All that is left standing of the original structure is the nave arcades of five arches on either side, and the corresponding southern aisle; the south arm of the transept, and the crossing; and, thirdly, the south aisle of the presbytery. The northern one has been altered and spoiled, and all that can be seen on the outside is a fragment of wall and a window. The northern aisle of the nave has been rebuilt in the style of the XIVth century, probably after the damage which the church is believed to have suffered in the siege of 1357, when the parish church of Sainte Croix, adjoining the fort within which the abbey stood, was destroyed. It was rebuilt in 1374. An old view[2] shows the church reduced to five bays and deprived of its apse.

The interior has an effect of rugged, severe majesty (Fig. 429). The nave has a wooden roof, and the piers are compound with two engaged columns. The vaulting

[1] Du Monstier, *Neustria Pia—Bernayum.*

[2] Peigné-Delacourt, *Monasticon Gallicanum.*

in the south aisle is work of the XVIIIth century. Above the aisles are galleries covered by very low roofs, and originally lighted from the nave by two-light openings enclosed by an arch. Above the arches of the crossing rose the lantern tower, now destroyed.

The south arm of the transept, which belongs to the original construction, has on its west side a passage or service gallery with lofty open arches (Fig. 430); while the

Fig. 429.—Bernay. Nave of Abbey Church (1013).

similar one on the eastern side has low arches. An ace of hearts is carved on the face of one of the piers belonging to the latter. With regard to this decorative motive of the ace of hearts, sometimes taking the form of an ace of spades, I may remark that it has been derived,[1] at least when it occurs later than the Vth century, from Syria. But this is not the case. These aces of spades and hearts, which are merely reproductions of the conventionalized outline of ivy or vine leaves with or without the stalk, had been used by Christian artists in the West from the earliest

[1] Courajod, *Origines de l'art roman et gothique.*

Fig. 430.—Bernay. Abbey Church. South arm of transept (1013).

times of Christianity, either as a symbol, or as a full stop, or in separating or abbreviating words. A defective tablet with an inscription of 269,[1] still exhibits ten aces of clubs, and originally fourteen or more. Nor was there any need for these artists to go to the distant East (*e.g.* the temple of Baalsamin at Siah founded about 23 B.C.) to find conventionalized ivy or vine leaves, for there were plenty of examples in the West. They appear, to take one instance, on a mosaic of the Romano-British period discovered at Silchester (Calleva Atrebatum) (Fig. 431).[2] And in Italy, not to mention the Romans, the Etruscans had used them in their tomb decorations from early times (Fig. 432).

The nave and aisles are continued for two bays east of the crossing, the central space having a wooden roof, while the aisles had roughly constructed cross vaulting (Fig. 433). The original rude capitals in the nave and choir are Corinthianesque, with stiff, plain, crocket leaves which take the place of the angle volutes. Some

Fig. 431.—Silchester. Portion of Roman mosaic. (*From "Archaeologia," Vol. LV.*)

have a crown of leaves, with a boss or rude human head instead of the flower

[1] De Rossi, *Inscriptiones Christianae urbis Romae.*

[2] *Archaeologia*, Vol. LV.—St. John Hope and Fox, *Excavations on the site of the Roman city at Silchester, Hants, in* 1895.

(Fig. 434). Some of them have been re-worked, probably in the days when the abbey was ruled by Vitalis (1060–1076), originally a monk at Fécamp and afterwards

Fig. 432.—Corneto Tarquinia. Wall painting in an Etruscan Tomb.

abbot of Westminster (1076–1082), when it attained its greatest prosperity. Some have even been treated with drapery, knobs, and Cherubim heads, in the fantastic baroque style of the XVIIIth century.

To judge by what is left, the external decoration of the building (Fig. 435) was confined to a stringcourse at the foot of the windows, and occasionally billet mouldings round the archivolts. The walls were entirely without buttresses. In short, it was a structure of noble proportions, but poor in mouldings and carving.

The architect was William of Volpiano ("Haec enim auctore Guillelmo abbate Fiscannensi . . .")[1] who personally directed the works at their outset ("qui in locandis fundamentis non modicum praestiterat consilii auxilium").[2] As to the builders, I imagine they were masons and workmen from Normandy, assisted by Italian or Burgundian master builders, and acting under their direction. What

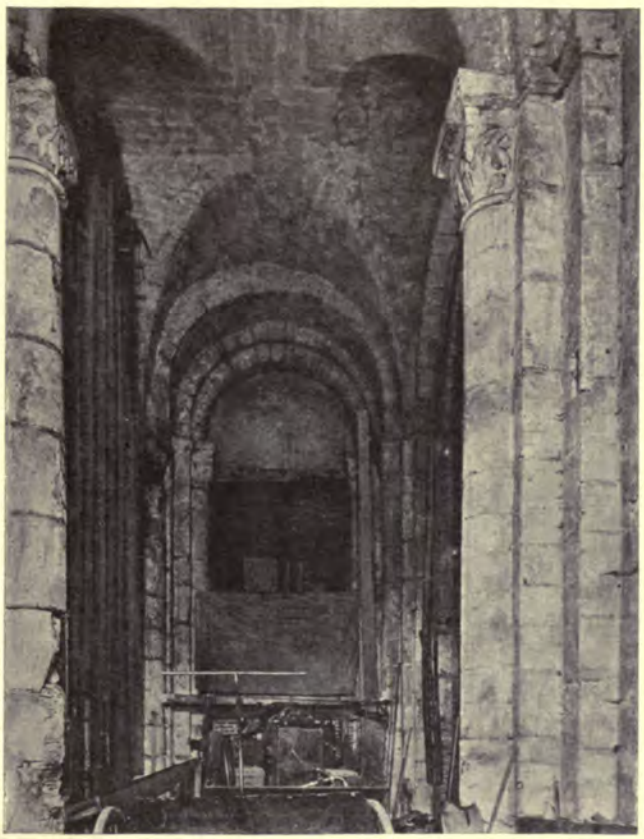


Fig. 433.—Bernay. Abbey Church. South aisle of presbytery (1013).

[1] Sammarthanus, &c., *Gallia Christiana—Abbatiae dioecesis Lexouiensis—Bernaicus.*

[2] Du Monstier, *op. cit.—Bernayum.*

Fig. 434.—Bernay. Capital in the Abbey Church (1013).

has survived of the work of Norman builders at a date not far removed from that of the erection of this church (*e.g.* at Jumièges) is more than sufficient to prove the impossibility of their undertaking a structure of this extent, or of constructing the vaulting which we see in the presbytery aisles at Bernay. A letter sent from Fécamp to Dijon in the time of abbot William[1] mentions the sending of master builders to Fécamp, that is to the centre of the religious, intellectual, and artistic life of Normandy. "De artificibus aedificiorum nostrorum quae coepimus, vos obsecramus quo . . . mittere ad nos festinetis, quia valde nobis necessarii sunt." This request must have been due to the small numbers and, still more, the lack of skill of the Norman workmen.

As for the carving (I refer, of course, only to the original work) I think we shall be right in ascribing it to Norman artists, perhaps inspired by artists among the monks who had learned how to handle the chisel during the erection of the great Burgundian edifice. At any rate, it is not from an Italian hand The crocket leaf is characteristic of the Norman School, which introduced it subsequently into England.

This church provides material for the following interesting observations:—

I. The plan of a Latin cross may come from that of SS. Peter and Paul, now Sant' Abondio outside Como (Vth century), that of the mausoleum of Galla Placidia (about 440), and, even more probably, that of Santa Croce (about 449) at Ravenna. These buildings, in their turn, were derived from cruciform Roman structures with a central cupola supported by a circle of columns, such as one illustrated in Montano.[2] In our case the plan shows two features worth notice.

[1] Paris, Bibliothèque Nationale, Coll. de Bourgogne, tom. XI.

[2] *Op. cit.*

Fig. 437.—Florence. Baptistery (XIth Century).

The first is that of the aisles prolonged beyond the crossing. There was a precedent for the idea in the church of the Nativity at Bethlehem (IVth and VIth centuries), where the aisles were continued into the choir.

The other is that of the subordinate apses projecting from the transept outside the line of the choir aisles. This arrangement seems to have some relation to the recesses taken out of the thickness of the eastern walls in the transept of the underground church of Saint Bénigne at Dijon; if indeed it were not borrowed from the Constantinian Vatican Basilica, where, as we learn from the plan made and published by Alfarano in 1590, the transept had niches on its western side (the side of the high altar), and in the end walls, all used for chapels and altars.

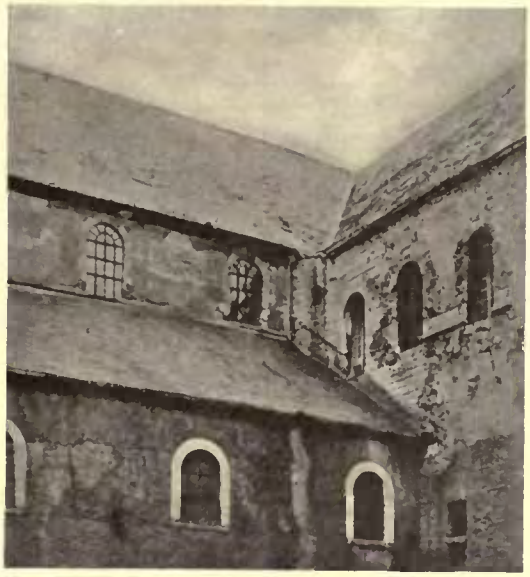


Fig. 435.—Bernay. South side of Abbey Church as seen from the prison yard (1013).

These two features were afterwards copied in the great abbey churches built under William of Volpiano's immediate supervision, or produced under the influence of the School of Fécamp, of which he was the founder and for many years the director.

II. The church affords the earliest instance of an arcaded wall-passage. Such passages, designed partly for purposes of communication, and partly for decorative effect, were suggested by passages like those in the Aurelian walls of Rome (Fig. 436). There is no trace of them in any church earlier than Bernay. Later, when they had been put at the level of the clerestory, in imitation of the arcading in the interior of San Pietro at Toscanella (739), and embellished, they formed one of the most striking and truly original features of Lombardo-Norman ecclesiastical architecture.

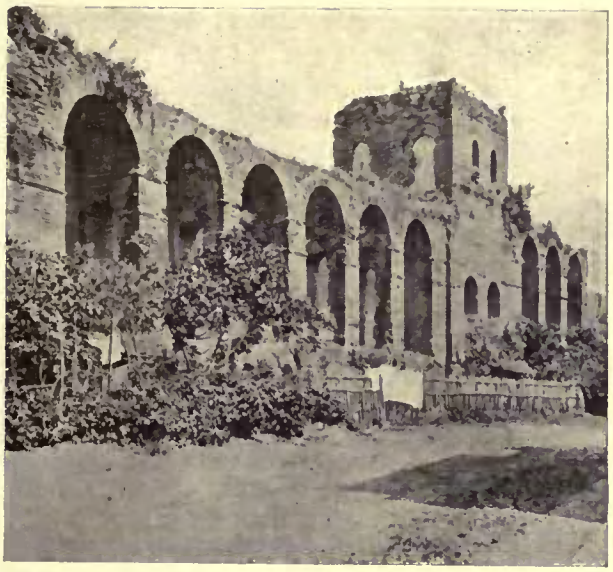


Fig. 436.—Rome. Aurelian Walls near the Porta Pinciana (IIIrd Century).

It has been suggested, indeed, that in the interior of the Baptistery of Florence a wall-passage with pairs of openings (Fig. 437) was constructed between the last years of the IVth century and the early ones of the Vth.[1] But this celebrated building was really a result of the material

[1] Nardini Despotti Mospignotti, *Il duomo di San Giovanni oggi battistero di Firenze.*

prosperity and religious zeal exhibited by Florence about the end of the Xth century.[1] It was not finished by 1057 or 1058, for otherwise it would have been consecrated by Pope Victor II (1054–1057) or his successor Stephen IX (1057–1058), both of whom died at Florence. The date of its completion was 1059, on the 6th of November of which year it was consecrated by Pope Nicholas II (1059–1061); and the dedication festival is still kept on that day.[2]

The pairs of openings have no intimate connection with the masonry of the building, and are therefore a later addition. The assertion that the presence of Ionic capitals in these openings is decisive against a mediaeval origin both for this baptistery and for all the other structures in Italy and the various European countries, where they occur,[3] is wrong. I will only mention here the Ionic capitals made expressly for the positions they occupy in the portico of San Lorenzo outside the walls (1216–1227) at Rome, and in the external open galleries of the façades of San Pietro (XIIth century) and Santa Maria Maggiore (1206) at Toscanella.

III. The church of Bernay tells us, thirdly, that in Normandy at the beginning of the XIth century great churches built in the new style, which was still in its infancy, had wooden roofs, except for the ground floor of the aisles. And further, that the characteristic Lombardic compound piers made their appearance in Normandy only after they had been in use for years in Italy, where they were first produced.

THE ABBEY CHURCH OF MONT SAINT MICHEL is known under the names of St. Michael "in monte tumba," St. Michael "in periculo maris," and St. Michael "de monte" (Figs. 438, 439, 440). Originally a mere chapel or oratory built by St. Aubert (about 708), bishop of Avranches, it was rebuilt after a fire (1001) in the time of Abbot Maynard II (991–1009) with a subsidy from Duke Richard II (996–1026), and was re-founded in 1020, when Hildebert II, a disciple of William of Volpiano, was abbot (1017–1022). This date, coming between the building of Bernay (1013) and the rebuilding of the church of Cerisy la Forêt (1030), would be considerably more important for us than it is had not the erection of the fabric been connected with dissensions between the monks of Mont Saint Michel and the abbot of Fécamp, which delayed its completion, and had it not in course of time undergone extensive alteration and rebuilding.

Fig. 438.—Mont Saint Michel in the XIth Century. (*From the Bayeux Tapestry.*)

Suppo, abbot of Fruttuaria, was appointed (1023) by William of Volpiano to succeed Hildebert II. But the opposition of the Norman monks, who objected to the rule of a foreigner (and Suppo was William's nephew), prevented his taking possession, and Almodus (1023–1031) and Theodoric (1031–1033), another nephew of William, were appointed to administer the abbey. His installation did not take place till 1033 by Johannelinus, abbot of Fécamp (1029–1078). Suppo remained abbot, in spite of the continual opposition of the monks, till 1048, when he went back to Fruttuaria.

These events were not of a kind to facilitate the progress of the new buildings then in course of erection. The works, in themselves, had already demanded a great

[1] Villari, *I primi due secoli della storia di Firenze.*

[2] [3] Nardini Despotti Mospignotti, *Il duomo di San Giovanni oggi battistero di Firenze.*

deal of time and trouble, on account of the massive substructions required for carrying out Hildebert's design of constructing on the summit of the conical rocky eminence a platform on which the church and conventual buildings were to stand. So that in 1048 the choir was hardly finished, and, in fact, Abbot Raoul de Beaumont (1048–1058) was still engaged in 1058 in erecting the piers and arches for the central tower. Abbot Ranulphe I de Bayeux (1060–1084) worked on the nave (according to some he entirely finished it),[1] which his successor, Roger I (1084–1106), completed in its upper part (Labbe[2] says that he put on the roof), only to see the north side collapse (1103),[3] Huynes stating that the nave fell down on that side.[3] The disaster

Fig. 439.—Mont Saint Michel in the XVIIIth Century. (*From the "Annales Ordinis S. Benedicti."*)

Fig. 440.—Mont Saint Michel in 1904.

was repaired by Roger II (1106–1123), under whom the abbey was set on fire by lightning (1112), the vaulting and walls being left without any covering. Bernard

[1] Sammarthanus, &c., *Gallia Christiana—Abbatiae dioecesis Abrincensis—S. Michael in periculo maris. Nova bibliotheca manuscriptorum librorum—De abbatibus M.S. Michaelis in periculo maris.* Robillard de Beaurepaire, *Huynes, Histoire générale de l'abbaye du Mont Saint-Michel au Péril de la mer.*

de Bec (1131–1149) raised a bell-tower above the four piers of the crossing, and Robert de Torigni (1154–1186) built two western towers, one of which fell shortly afterwards, and added a porch to the west front.

Fig. 441.—Mont Saint Michel. Abbey Church. Capital (1048–1058).

Such is, in brief, the generally accepted history of the church of Mont Saint Michel in the XIth and XIIth centuries, as it may be found in the latest publications on the subject.[1] [2] Of this church (in the form of a perfect Latin cross, like William's design for Bernay), damaged on several occasions by fire, by the fall of the central tower and of the choir which was rebuilt in the Pointed style of the XVth and XVIth centuries, deprived in the XVIIIth of three out of the seven bays of the nave and aisles which threatened to collapse, the only portions that survive are the transept and the four easternmost bays of the nave and aisles.

This history requires correction in one point, viz. as to the works carried out under the eighth abbot, Raoul de Beaumont, originally a monk at Fécamp, and appointed by William of Volpiano in 1028 to take charge of the abbey of Bernay. For Raoul's operations cannot have been confined to the piers and arches forming the central bay or crossing, but must have extended to a part of the body of the building, in order to abut the piers and enable them to resist the weight and thrust of the arches. An examination of the structure during the last restoration has in fact made it clear to me that the two bays nearest to the crossing are, owing to various features which they present, evidently the work of a different period from that of the next bays; and this period is nearer to the first than the second half of the XIth century. In these bays, the imposts of the two-light openings in the south gallery have a different outline from that in the next bays. Further, one of the original crocket capitals with a human head (Fig. 441) is very similar to the earlier ones at Bernay (1013) and Cerisy la Forêt (1030–1066); while it is itself clearly older than those

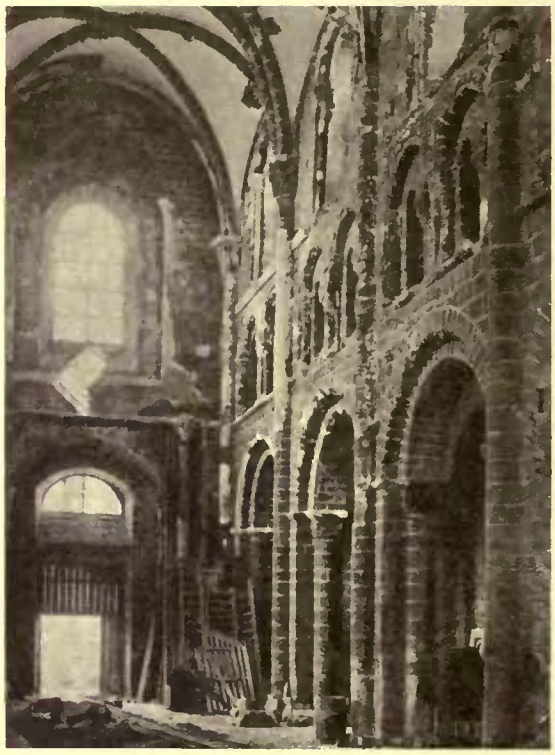


Fig. 442.—Mont Saint Michel. Abbey Church (XIth and XIIth Centuries).

[1] Gout, *L'histoire et l'architecture française au Mont Saint-Michel.*
[2] Corroyer, *Description du Mont Saint-Michel.*

in the crypt of the Trinité (1064–1066), and others in Saint Étienne at Caen (1066–1086), and must therefore be dated before 1064.

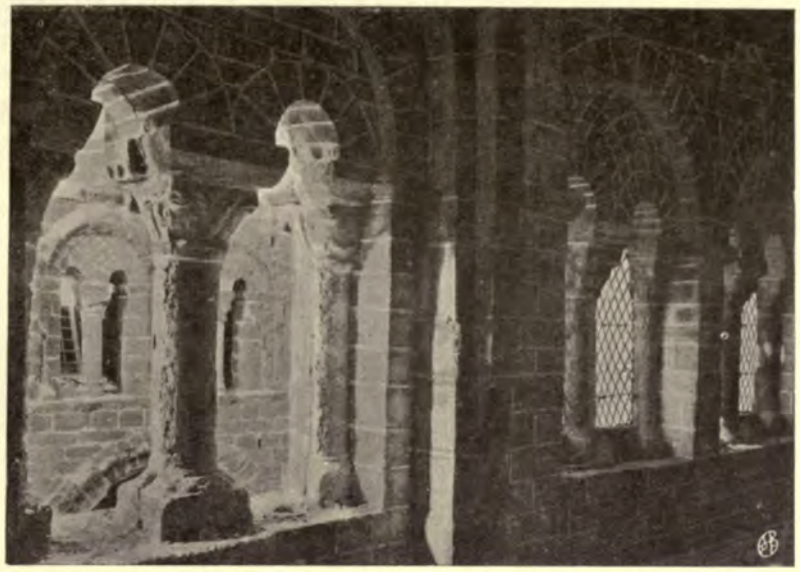


Fig. 443.—Mont Saint Michel. Triforium in Abbey Church (XIth and XIIth Centuries).

The body of the church is divided into nave and aisles (Fig. 442) by cruciform piers of uniform size. The nave had a wooden roof, while the aisles have rudely constructed unraised cross vaulting. The triforium (Fig. 443) gets its light from the nave, and is covered by a sloping roof. The exterior is marked by lesenas which to some extent have suffered from alteration (Fig. 444).

The low triforium without direct lighting, more lofty, however, than the one at Bernay, which is also without windows, but not of large size with windows in the aisle walls which are carried up above the vaulting, as at Cerisy la Forêt; and the absence of wall-passages in the clerestory, as at Bernay, while that system of communication and decoration is employed at Cerisy la Forêt, prove that in the construction of the body of the church the design of the original choir (1020) was followed. And that is the reason why we deal with the building in this place, so that it may form a link in the chain of the history of the Lombardo-Norman basilica.

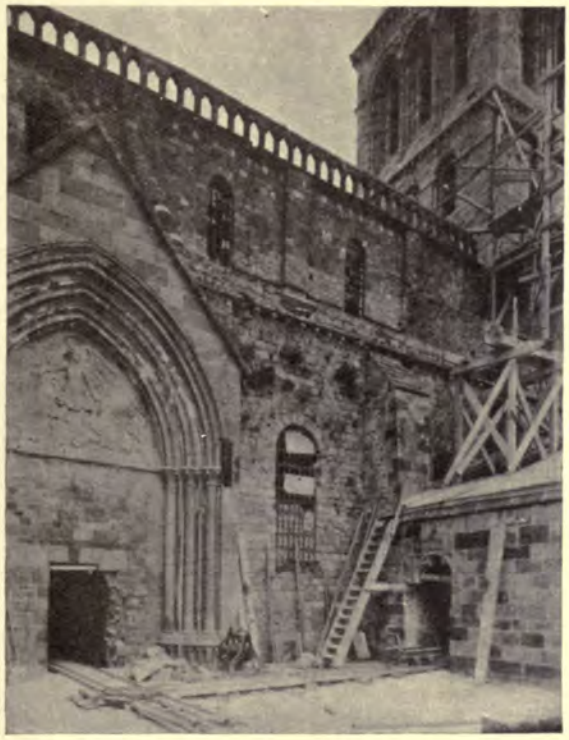


Fig. 444.—Mont Saint Michel. South side of Abbey Church (XIth and XIIth Centuries).

Mont Saint Michel was the work of the School of Fécamp founded by William of Volpiano, and was modelled on the abbey church of Bernay, from which it differs by its piers with roofing shafts, not only in the choir but in the transept and the whole of the nave; by the lesenas which strengthen the walls on the outside; by the triforium with its

pairs of two-light instead of single openings, and greater space gained by carrying up the aisle walls ; and by the absence of wall-passages in the transept. It exhibits only one advance in scientific construction over its original, viz. the use of buttresses at the points most in need of support, with the object of compensating for the reduced thickness of the outer walls.

We will conclude by remarking incidentally that of the two well-known churches with the title of Mount St. Michael—the one just described, and that at Chiusa (Fig. 445) on the summit of the Monte Pircheriano in the Val di Susa—the

Fig. 445.—San Michele della Chiusa. Abbey Church (XIIth Century).

latter no longer provides any materials for our studies. Of the original church on Monte Pircheriano, founded, according to some, in 966, or between 999 and 1002 according to others, by Hugues de Montboissier, all that is left is the plan of a basilica of small dimensions and irregular outline, with nave and aisles ending in apses, beneath the floor of the present church, which was erected about the second half of the XIIth century.

THE ABBEY CHURCH OF CERISY LA FORÊT was erected in 1030 by order of Duke Robert II, called by some "the Magnificent" and by others "the Devil" (1028–1035), to replace the church founded by St. Vigor, bishop of Bayeux (514–537),[1] and destroyed by the Normans. It was dedicated to him in 1032.

[1] Du Monstier, *op. cit.—Cerasium.*

The primary operations were directed by the abbot Durandus (1030–1033), previously a monk of St. Ouen at Rouen, and after him by Almodus († 1033) who had been in charge of the abbey of Mont Saint Michel (1023–1031). After the death of Robert II the building was continued and finished (with the exception of the west front, where the towers were left incomplete) by Duke William II, the Bastard (1035–1066), afterwards King William I, the Conqueror (1066–1087), through the instrumentality of the third abbot Garin (1032–1066) who had been a monk of Mont Saint Michel.

Fig. 446.—Cerisy la Forêt. Abbey Church. Capital in the nave (1030–1066).

Altered in the XIIIth century by the vaulting of the presbytery, nave, and transept, at which time the west front was modified by the addition of a porch; damaged in the XVIIIth century by the collapse of a part of the north arm of the transept, and by lightning in the XVIth, XVIIth, XVIIIth and XIXth centuries, it was partly demolished in 1811, and reduced to its present condition.

Fig. 447.—Cerisy la Forêt. Abbey Church. Triforium (1030–1066).

Generally speaking its plan is a copy of those of Bernay and Mont Saint Michel. The only difference is the feature of the piers which bisect the extremities of the transept and carry galleries. Of the structure of Robert II and William II there remain, three of the eight original bays of the nave, the last of which was flanked by the two western towers, the whole of the upper limb of the cross, and the transept, of which the northern arm has been mutilated.

In the nave the arches spring from compound piers, alternately larger and smaller, cruciform in section with four half-columns and the same number of angle shafts. The capitals are Lombardo-Norman Corinthianesque, not continuous, however, like the Lombardic, but confined to the columns. They occasionally recall those with figure subjects in San Flaviano at Montefiascone, and the vegetable forms are treated fairly well, though without much undercutting. The animal representations, however, are very barbarous, especially those of human beings (Fig. 446).

Fig. 448.—Cerisy la Forêt. Abbey Church. South arm of the transept (1030–1066).

Fig. 449.—Cerisy la Forêt. Choir of Abbey Church (1030–1066).

The aisles have cross vaulting. Over them extends a spacious triforium with wooden roofs (Fig. 447). Above, in the clerestory, a service gallery is constructed, with triplet openings enclosed by a single arch after the Ravennate fashion, and this runs the whole way round the building. The nave and choir had originally a wooden roof, and the walls were not tied together by transverse arches as some have imagined.[1] [2] Any one can satisfy himself of this who takes the trouble to mount to the present vaulting. The two lowest stages of the central tower belong to the original work. The south arm of the transept (Fig. 448) still retains its gallery carried on arches, and terminates on the east in an apsidal chapel opening out of both floors, not in its original condition.

The aisles and triforium extend for two bays east of the crossing. The deep semi-elliptical apse (Fig. 449) has a range of blank arcading round its base. The middle stage contains a wall-gallery in continuation of the triforium, while round the clerestory runs a service gallery. Originally it had a wooden roof, but this was replaced in the XIIIth century by vaulting in radiating sections.

The great display of tiers of multiplied arches in this apse, giving it an effect of severe majesty, has a decorative as well as a practical object which, it seems to me, was suggested, on the one hand, by the desire to give a magnificent appearance to the most sacred part of the church, and, on the other, by the difficulty of procuring marbles for lining the walls, or artists capable of decorating the vault with adequate paintings or mosaics. The motive of lofty arches

[1] Dehio and von Bezold, *op. cit.*

[2] De Farcy, *Abbayes de l'évêché de Bayeux—Cerisy.*

to decorate the internal wall of an apse is an old one. The apse of the "Bishop's chapel," going back to the time of Frugiferus, first bishop of Trieste (524–about 568) and founder of the cathedral,[1] provides an instance of a range of arches supporting the half-dome (Fig. 450).

The church is lighted by round-headed windows, splayed on the inside. The walls of the exterior (Figs. 451, 452) show frequent use of herring-bone work, and are strengthened by buttresses. The lantern tower is embellished with blank arcading. The fact that this is partly hidden by the main roofs of the church has suggested the idea[2] that the nave and transept had originally a flat roof covered with sheets of lead on the outside, and with a ceiling within. But the XIth century builders certainly used gabled roofs in such cases; and the architect would never have followed any other plan, considering the region in which the church was situated with all its rain and snow, under whose weight a flat roof might have given way.

Fig. 450.—Trieste. Duomo. "Bishop's chapel" (524–about 568)

It is not known whether the plans for Cerisy la Forêt were made by Durandus, or by him with suggestions from William of Volpiano, who, just at the time when the rebuilding was begun, had come back from Fruttuaria to Fécamp, where John of Aglié, called "Johannelinus," was then abbot (1029–1078), and where William himself died in 1031. It is, however, certain that the designs were modelled on two buildings of the School of Fécamp, Bernay, and Mont Saint Michel, from which it proclaims its direct and immediate descent.

The builders were apparently Normans; at least, there are no signs of any Italian gild in any part of the work, from the rough, unraised, and heavy cross

[1] Gams, *op. cit.*

[2] De Farcy, *op. cit.*

vaulting, to the carving on the capitals. The craftsmen of Normandy were at last, for better or worse, self-sufficing, though they may have had the aid of carvers who were monks or came from some other part of France, *e.g.* Anjou, where as early as 1028 representations of living beings were being produced, as we noticed in the church of Ronceray. Very different was the cross vaulting produced at the same period in Italy, sometimes with bold ribs after the Lombardic fashion, as in San Flaviano at Montefiascone (1032), which is nearly contemporary with Cerisy. Very different, too, was the carving, as San Flaviano again bears witness.

Fig. 451.—Cerisy la Forêt. South side of Abbey Church (1030–1066).

Cerisy shows a notable advance over Mont Saint Michel in organic forms, by the adoption of two of the typical characteristics of the Lombardic church. On the one hand, the triforium is lighted directly from the raised outer walls, which by their additional weight strengthen the lower part corresponding to the aisles. The other Lombardic feature is the alternation of large and small piers. Lombardic influence is further illustrated by the characteristic arcaded wall-passages. And, finally, it appears in the two stages of wall-passages round the apse, continuing the triforium and clerestory passages. It thus marks another notable step towards the perfection of the Lombardo-Norman basilica.

The characteristic arcaded clerestory passages of the nave, choir, and apse, which combine their immediate utilitarian object with a constructive and static purpose, viz. that of diminishing the weight of the upper part of the walls, and also with a decorative intention, have the merit of absolute novelty. We saw their beginnings at Bernay and in San Pietro at Toscanella (739). Before the erection of Saint Vigor, service passages were either mere gangways protected by a railing, carried along projecting cornices above the architraves of colonnades and galleries in large naves, or else below the impost line of domes and half-domes. Such passage-ways are

illustrated by the old St. Peter's at Rome (IVth century) (Fig. 453), and by St. Irene (VIIIth century) and St. Sophia (532–537) at Constantinople.

Another novelty at Cerisy is the arcaded passage formed in the thickness of the apse walls, and continuing the triforium. It was suggested by apsidal galleries like the upper stage of the apse of Santo Stefano at Verona (Xth century), and by the blank arcade in the apse at Germigny des Prés (801–806).

Fig. 452.—Cerisy la Forêt. Abbey Church from the south-east (1030–1066).

We should also notice the feature of the transept galleries, which first appeared in the Lombardo-Norman basilica, and was suggested by the two porticoes at the ends of the transept in the Constantinian Vatican basilica.

In the same way we should note the first appearance in Normandy of animal figures on capitals. In Italy, after making a timid display in San Babila at Milan early in the XIth century, they had attained considerable development by 1032 in San Flaviano at Montefiascone; but in France they did not appear till somewhat later. Notre Dame de la Charité at Angers, consecrated in 1028, affords a very early dated example. If its capitals betray Lombardic influence, the handiwork of French carvers is no less

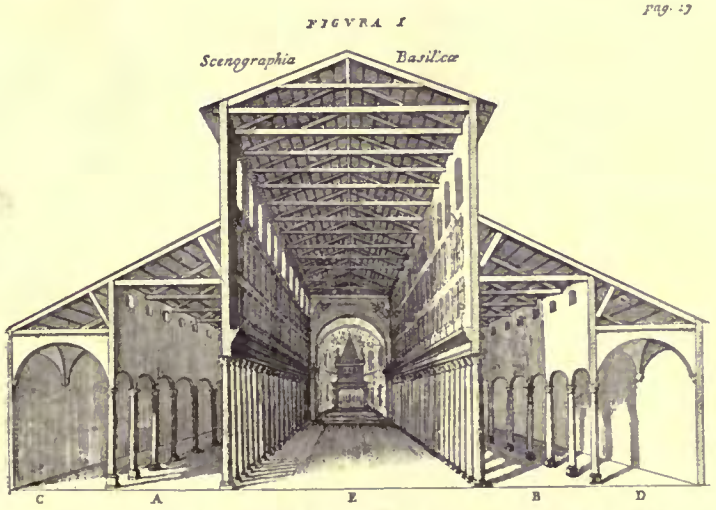


Fig. 453.—Rome. Old St. Peter's (IVth Century). (*From Bonanni, "Templi Vaticani Historia."*)

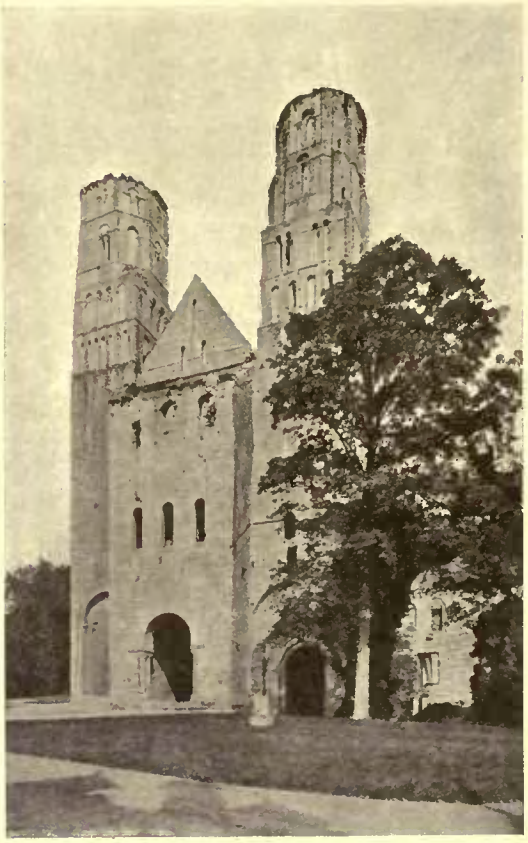


Fig. 454.—Jumièges. West front of Abbey Church (1040–1066).

obvious. To mention only one point, the crocket leaves were not the work of any Italian chisel.

THE ABBEY CHURCH OF JUMIÈGES, begun in 1040 by the well-known Robert II, one of the advisers of Edward the Confessor (1042–1066), for a short time bishop of London (1044), afterwards archbishop of Canterbury (1051–1052), and from 1037 onwards abbot of Jumièges, was finished in 1066 and consecrated in 1067, in the presence of William the Conqueror (1066–1087),[1] [2] [3] by Maurilius, archbishop of Rouen (1055–1067), a disciple of William of Volpiano and an Italian by birth according to one account, though others say that he was born at Rheims.

After the alterations of the XIVth century, and the destruction in the first years of the XIXth, all that is left of the original building is the west front (Fig. 454), the body of the church as far as the crossing, and a portion of the latter and the central tower (Figs. 455, 456). Within the front, flanked by a pair of very lofty towers, a narthex of two stories is formed. The carving of the two Lombardic capitals (Fig. 457) in the upper one is later. In the towers, the square base passes into an octagon, and the octagon into a circle, by means of conchiform squinches or hood-shaped raccords. The nave, which was designed for a wooden ceiling, has eight round arches on either side, and square piers with three half-columns attached (the half-piers of Pointed character on the nave side are a XIVth century addition), alternating with cylindrical piers which are not tapered. In all these supports, and the corresponding ones in the outer wall, the columns are surmounted by quadrangular funnel-shaped cubical capitals, which sometimes have a ridge down the middle, and the angles hollowed out. The left aisle still retains its original unraised cross vaulting of rough construction, above which is the triforium with similar

Fig. 457.—Jumièges. Abbey Church. Capital in upper narthex (XIth or XIIth Century).

[1] *Rolls Series—Willelmi Malmesbiriensis monachi gesta regum Anglorum.*

[2] Du Monstier, *op. cit.—Gemeticum.*

[3] Loth, *Histoire de l'abbaye royale de Saint-Pierre de Jumièges.*

vaulting. The latter, on the nave side, has triple openings enclosed by a single arch after the Ravennate fashion.

On the outside, the north wall of the aisle and triforium, which is visible and in good preservation, is strengthened by massive buttresses corresponding to the wall piers within (Fig. 458). Their present stepped form is the result of later alterations. The central tower, which is square and not octagonal as stated by Cordero,[1] had

Fig. 455.—Jumièges. Nave of Abbey Church (1040–1066).

originally a wooden roof. The ruins of the transept show that the side walls were pierced in their highest part by passages.

Notwithstanding all the injuries inflicted by time and human agency, the latter being by far the most serious, enough is left of this impressive church to compel the spectator on the first view to pause and admire, not indeed the elegance of its decoration or the grace of its forms, but its severe lines, its noble proportions, and the grandeur of the whole effect.

[1] *Op. cit.*

The church of Jumièges, rude but excellent example as it is of the method of building prevalent in Normandy about the middle of the XIth century, displays a

Fig. 456.—Jumièges. Nave and transept of Abbey Church (1040–1066).

marked advance on the way towards the perfection of the Lombardo-Norman basilica, by the extension of cross vaulting to the aisles and triforium, the angle thrust being met by substantial buttresses outside. Choisy [1] speaks of this as a risky undertaking, and one that must appear so when we think of the depression of the vaulting and the consequent increase of thrust, and also of the time when it was done. And it could only be carried out at the expense of the direct lighting of the triforium.

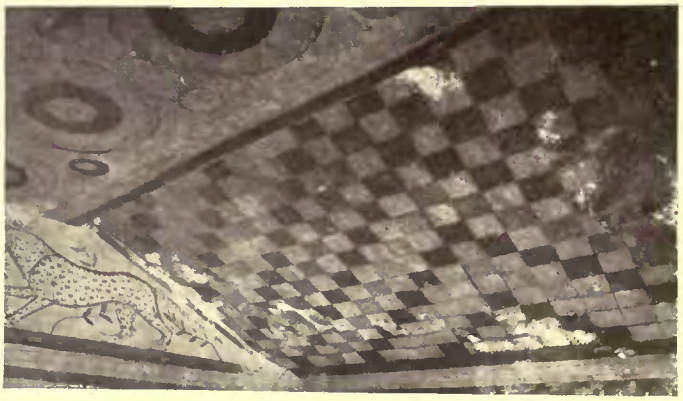


Fig. 459.—Corneto Tarquinia. Painting in Etruscan tomb.

Next, we may notice the hood-shaped raccords

[1] *Histoire de l'architecture.*

in the western towers, the earliest instance of this form north of the Alps to which I can point. The central tower is also notable because, though the explosives intended to destroy it at one blow in 1802 have spared only one of its four sides, what remains makes it clear that it had a roof of wood and not of masonry, and, with the traces left of the nave roof, enables us to restore its form and that of the ceiling below it—details which are of interest for the history of Norman architecture.

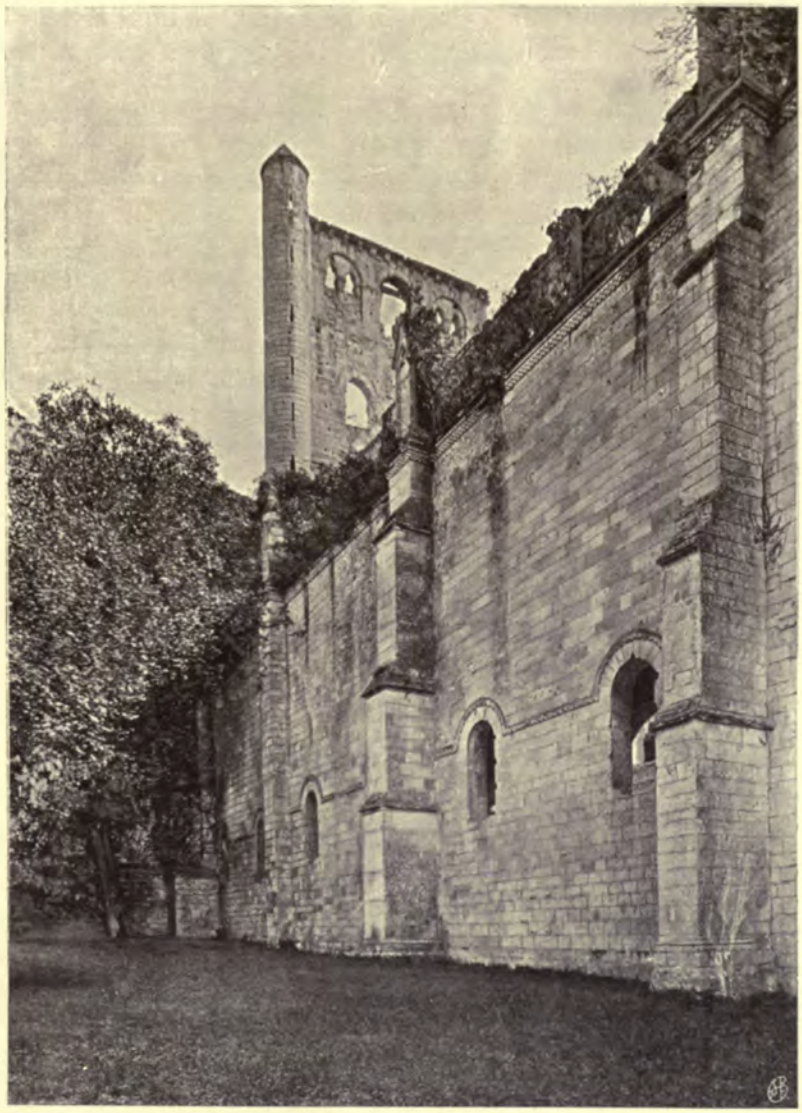


Fig. 458.—Jumièges. North side of Abbey Church (1040–1066.)

Nor should we omit to notice the presence of a decorative form not previously used in ecclesiastical architecture, viz. the bands of chequer pattern, so frequently reproduced later in Normandy and England, and finally applied by the architect Lanfrancus to the capitals in the cathedral at Modena (1099–1106). This chess-board motive was a favourite one with the Etruscan artists, who often employed it in tomb-paintings (Fig 459). The Romans applied it specially in mosaics.

On the other hand, we must not ignore the retrograde step taken by the designer

in going back to some of the forms of the church at Bernay (*e.g.* the absence from the nave piers of roofing shafts rising to the point where they could carry the main beams of the roof, and the lack of wall-passages with open arches springing from thick piers) which are a negation of the progress we remarked at Mont Saint Michel and Cerisy la Forêt. This retrogression may, perhaps, have been due to the theories of construction which Robert II had learned in the school of William of Volpiano, and also, in the case of the piers, to the desire of keeping the nave freer by suppressing the wall shafts with their bases, and relying on the considerable thickness of the nave walls and the substantial buttresses outside for resisting the weight and thrust of the main beams of the roof.

Lastly, we must notice the alternation of massive piers with squat, untapered columns, an arrangement which demands some remark.

The organic conception of supports alternately substantial and slight, which was introduced in the first Lombardic vaulted churches, had no connection with the device of pairs or triplets of columns alternating with piers, as in Santa Maria in Cosmedin and Santa Prassede at Rome, in spite of the reiterated assertions to the contrary of so many writers, one of whom, Enlart,[1] adds that the expedient was the origin of a whole constructive system. For the last restoration of Santa Maria in Cosmedin has revealed the fact that the church of Hadrian I (772-795) was rebuilt in the XIIth century, only some of the oldest parts being preserved. And the piers in Paschal I's (817–824) church (in the shape of a "crux commissa" where the transept forms the horizontal limb of a **T**) are the result of one of the remodellings which the building underwent. The alternate large and small supports found in Normandy are really due to Lombardic influence. In Italy it occurs as early as 985 in SS. Felice e Fortunato near Vicenza, and in 1013 at San Miniato near Florence.

* * *

The church of Jumièges forms the climax of the series of Lombardo-Norman buildings erected under the auspices of William of Volpiano. We have now to watch the rise of another series, essentially as important as the first, and superior to it in the intrinsic value of its results; one, too, in the course of which the style in question will be seen to take fresh and important steps towards completion.

Lanfranc, born at Pavia (1005) and educated in its venerable and flourishing school, the centre of Latin culture at the time, had left his home for France accompanied by a band of colleagues and disciples, and opened a school at Avranches (1039). Then, quite unexpectedly, he abandoned teaching, shut himself up in the monastery of Bec (1042), erected about that time by Erluin, previously abbot of Burneville (1034), and there received the coarse habit of a Benedictine monk. Thanks to him, this obscure convent soon became the intellectual centre of the Christian world. To the school which he there opened, and of which he was the life and soul, laymen of every station flocked from the most distant regions; the great sent their sons to it; the most famous masters, the most profound dialecticians regarded it as a special privilege to be allowed to frequent it.[2] [3] [4]

[1] *Op. cit.*

[2] Duchesne, *Hist. Normann. script. antiqui—Willelmi Calculi historia Normannorum.*

[3] Le Prevost, *op. cit.*

[4] Mabillon, *Acta Sanct. Ord. S. Benedicti—Crispinus Milo—Vita B. Lanfranci.*

Erluin's buildings at Bec being found too small for such a concourse, new and more spacious ones took their place, and were consecrated in 1077. Lanfranc, who had been appointed prior (1045–1066), designed them and began the work, which was finished by Anselm.[1] Nothing is left of this new structure, which is all the more to be regretted because it was the first essay in architecture of the creator of Saint Étienne at Caen and many other famous churches. And so it comes about that we are obliged to make Saint Étienne itself the point of departure for the architectural epoch which succeeded that of William of Volpiano, and must be called the epoch of Lanfranc.

THE ABBEY CHURCH OF THE TRINITÉ AT CAEN.—The exact date of its erection is not known. Du Monstier[2] puts it in 1064. It was dedicated in

Fig. 460.—Caen. Abbey Church of the Trinité. Crypt (1064–1066).

1066.[3] But the dedication clearly implied by the well-known charter of Duke William[4] ("coniux mea Mathildis . . . construxit basilicam") can only refer to the choir and crypt beneath it. It must have been finished by 1082, for in the deed of foundation which appears in Du Monstier we read that William the Conqueror and Queen Matilda had built the church ("ecclesiam . . . pro salute animarum nostrarum coaedificavimus"), and by the same deed the abbey was endowed with a noble revenue for its support.

Fig. 461.—Caen. Abbey Church of the Trinité. Capital in the crypt (1064–1066).

The only part of the original building preserved intact is the crypt (Figs. 460, 461). The church as a

[1] Migne, *Patr. Lat.*, Vol. 150—*Chronicon Beccensis abbatiae.*
[2] *Op. cit.*—*Cadomus.*
[3] Le Prevost, *op. cit.*
[4] Sammarthanus, &c., *Gallia Christiana*—*Instrumenta Ecclesiae Baiocensis.*

whole (speaking of the parts that are old) is the result of a general remodelling in the XIIth century (Figs. 462, 463).

THE ABBEY CHURCH OF SAINT ÉTIENNE AT CAEN was, like the Trinité, founded in expiation of the marriage contracted by Duke William II with Matilda of Flanders in face of the prohibition decreed by the Council of Rheims (1049). About the dates when it was begun and when it was consecrated, there is disagreement

Fig. 462.—Caen. Abbey Church of the Trinité (XIIth Century).

among the contemporary writers and chroniclers. Du Monstier[1] places the former in 1064. But seeing that Lanfranc, the architect of the building (his subordinate was his pupil Ralph, afterwards prior of Caen), was appointed the first abbot of Saint Étienne in 1066,[2] we may infer that the latter year is the more probable date, if not of laying the first stone, at any rate of the beginning of building operations on a large scale. As to the consecration, the date 1077, given by Ordericus Vitalis,[3] must be that of the choir, transept, and part of the nave; while that of 1081 or

[1] *Op. cit.*—*Cadomus.* [2] [3] Le Prevost, *op. cit.*

1086, which appears in Du Monstier, will refer to some minor ceremony[1] relating to the completion of the building and the alterations effected in the west front and the towers.

What is left of the original church comprises the western limb of the cross with the west front and internal narthex and the transept. The eastern limb (except part of the triforium) and the apse, together with the apsidal chapels in the transept were sacrificed to the rage for the Pointed style.

The body of the church, entered through a two-storied narthex confined between the western towers, is divided into nave and aisles by an arcade with compound

Fig. 463.—Caen. Abbey Church of the Trinité (XIIth Century).

piers alternately larger and smaller (Fig. 464). The half-columns belonging to these supports (Fig. 465) and those in the triforium (Fig. 466) are surmounted by Corinthianesque capitals supporting a continuous abacus, and ornamented with plain crocket leaves, carved foliage, projections either plain or graduated, and with human or semi-human heads. These capitals, though their conventional treatment betrays a want of imagination in the carvers, are nevertheless well designed, with free movement and bold relief, but not completely undercut. The same, however, cannot be said of the figures; for no sooner do the carvers leave the treatment of foliage than they fail and become clumsy. The heads, something between man and beast, with erect pointed ears, should be noticed, for this stylistic representation, with another which we shall

[1] Freeman, *The History of the Norman Conquest of England.*

see on the piers of the central tower, crossed the Channel, and served as a model for the carvers of Great Britain, *e.g.* those who worked in Durham Cathedral (1093–1133).

The aisles, originally covered by unraised cross vaulting, have triforium galleries over them, roofed by ribbed half-barrel vaults (Fig. 467). If this barrel vaulting is not original, everything shows that it merely replaced an older roof of the same kind.

Fig. 464.—Caen. Abbey Church of Saint Étienne (1066–1086).

Nor can Ruprich-Robert's [1] idea that it was unnecessary be maintained, for at Jumièges (1040–1066) it was precisely the triforium that was vaulted, while the nave had a timbered roof. Its object is easily explained by the architect's desire to increase the stability of the nave walls, which, though about 4 feet 6 inches thick, were considerably weakened by the wall-passages with their wide arches, and also by the external blank arcading. The expedient adopted at Saint Étienne was afterwards followed by Serlo in the choir of Gloucester, rebuilt in 1089.

[1] *Les voûtes de l'abbaye-aux-hommes à Caen.*

Above the triforium on either side runs a clerestory passage with triplet openings, the result of an alteration which is believed to have been carried out in the XIIth century, when the existing vaulting was substituted for the original ceiling of the nave and choir. In the course of this, new clerestory arches were opened lower down, with the object of enabling the walls to offer more resistance to the thrust of the vaulting. Their

Fig. 465.—Caen. Abbey Church of Saint Étienne. Capitals in nave (1066–1086).

Fig. 466.—Caen. Abbey Church of Saint Étienne. Capitals in triforium (1066–1086).

capitals are in the form of truncated and inverted half-cones and wicker baskets, or else they show monsters with serpents' tails, foliage, interlacings, lions, monsters with demon heads and limbs ending in cauliculi. The archivolts are ornamented with an embattled moulding sunk in the thickness of the wall. All the instances of the embattled and zigzag moulding which appear on the interior walls of the church are later additions. At the same time was inserted the continuous course of billet moulding carried round the capitals of the vaulting shafts; and the capitals themselves were carved. The half wall-piers were also converted into shafts from which to spring the ribs of the groining.

Above the present vaulting may still be seen the continuous impost cornice at the height of the original ceiling; and in the north wall there are traces of two of the original openings of the service passage, each of four lights, with roll mouldings, and uniform in size like those at Cerisy la Forêt.

In the central tower, the arches of which are not in their original state, the capitals of the piers exhibit, besides the usual single or combined leaves, a human head, and another characteristic semi-human one with pointed ears and no lower jaw, but a row of dog's teeth in the upper one.

Fig. 467.—Caen. Abbey Church of Saint Étienne. Triforium (1066–1086).

The ends of the transept are occupied by galleries with unraised cross vaulting (Fig. 468). Here the figure carvings are barbarous in design and no less rude in execution, and teach us that if the Norman craftsmen had by this time learned to treat pure decoration with some grace, they were still far from being at home in dealing with the human form.

In the triforium of the existing choir are to be seen part of an arch parallel to the axis of the building, and some Corinthianesque capitals, both belonging to the original work.

Bouet[1] argues that the original choir had cross vaulting, but there is not the smallest evidence to support the idea.

Fig. 468.—Caen. Abbey Church of Saint Étienne. Gallery in north arm of transept (1066–1086).

Fig. 469.—Caen. North side of Abbey Church of St. Étienne (1066–1086).

The exterior of the nave, aisles, triforium, and central tower is embellished with blank arches and arcading (Fig. 469). The west front (Fig. 470) contains three Lombardic portals (Fig. 471) which have been partly rebuilt. The three stages of the towers, with their wall arcading, must be assigned to between 1081 and 1086; the upper portions were completed at later dates.

Saint Étienne, though, on the whole, it belongs to the type established by William of Volpiano, presents certain organic and decorative features which differentiate it from that type; and some of these mark a new step towards the completion of the Lombardo-Norman basilica.

In this church Lanfranc remained content to carry the vaulting shafts up to

[1] *Analyse architecturale de l'abbaye de Saint-Étienne de Caen.*

the roof, hinting at a desire to cover the nave with cross vaulting, which, however, he never fulfilled (in spite of Bouet's [1] idea to the contrary), deterred perhaps by the inefficiency of his master masons. For the primatial church of Canterbury, which he began shortly after (1070), had a wooden roof; and similar roofs, without even the support of transverse arches, were provided for the first great churches built in England by his pupils. With this new arrangement goes that of the single arch openings of the triforium. Other peculiarities are the following:

I. The Ravennate motive of external arcading corresponding to the nave arches in the interior. Such applied arcading appeared in Saint Bénigne at Dijon, but it does not occur in the naves of the great Norman abbeys.

II. The blank external galleries forming a finish to the side walls of the church. I cannot remember any earlier example of this feature in Normandy. In another part of France, an older instance is presented by the abbey church of Ronceray at Angers (1028). Some writers give the Normans credit for its invention, whereas it is a creation of the Lombardo-Ravennate style.

Fig. 470.—Caen. West front of Abbey Church of Saint Étienne (1066–1086).

Fig. 471.—Caen. Abbey Church of Saint Étienne. Portal in west front (1066–1086).

III. The arched corbel course forming a continuous cornice: the first of its kind to appear in a Lombardo-Norman church.

IV. Lastly, there are the portals of the west front. This is the first occasion on which we can verify their appearance in a building of the Lombardo-Norman style.

Further, we must not omit to notice the remarkable progress shown in the carved foliage of the capitals in Saint Étienne, compared with work of the same kind in earlier Norman buildings. These capitals are differentiated by their artistic quality, not only from the contemporary ones in the crypt of the Trinité at Caen, but also from those of the same date in the crypt of the

[1] De Caumont, *Bulletin monumental*, 1863—*Seconde lettre à M. de Caumont au sujet des voûtes de Saint-Étienne de Caen.*

cathedral of Bayeux, rebuilt by Bishop Hugh about the year 1044, finished and decorated by Odo I (1050–1097), and finally reconstructed after the fire of 1105.

This latter crypt is not the work of Hugh or Odo, as has been thought,[1] [2] some[3] actually believing that the existing church is Hugh's work and not a reconstruction. Of the time of Hugh or Odo I (who was, according to Gams,[4] the builder of the church, which he consecrated in 1080) nothing is left save the outer walls, and some of the isolated supports with their bases and capitals showing

Fig. 472.—Bayeux. Cathedral (XIIth and XIIIth Centuries).

plain, stiff, turn-over leaves and crocket leaves. In some cases they have been re-worked and embellished by carving the leaves. The rest is a reconstruction carried out by Bishop Philippe d'Harcourt (1142–1164), and of this there remains the Lombardo-Norman part of the nave (Fig. 472), the church having been largely rebuilt in the XIIIth century. To the time of Bishop Philip belong, for instance, a capital with foliage and human heads with cauliculi protruding from their mouths,

[1] Mylne, *The Cathedral Church of Bayeux.*
[2] Freeman, *op. cit.*
[2] Béziers, *Mémoires pour servir à l'état historique et géographique au diocèse de Bayeux.*
[4] *Op. cit.*

and another with inverted half-cones surmounted by a denticulated cornice, this last type of capital not having been introduced when the crypt was built, as it appears in France for the first time at Boscherville. To the same date belong the bases of Pointed character, and the beautiful continuous unraised cross vaulting. The Norman builders of the XIth century, though fairly skilful on the whole, were still indifferent constructors of vaulting. Ruprich-Robert[1] has called attention to their weakness in this respect, even during the next century.

THE CHURCH OF SAINT NICHOLAS AT CAEN, though not erected from the designs of Lanfranc, is immediately derived from his church of Saint Étienne, and is traditionally said to have been planned by monks who were his pupils, the same builders being employed who erected the abbey church. It will, then, be convenient to describe it next after the latter.

It is said to have been begun about the year 1080,[2] when the work on the west front of the neighbouring Saint Étienne was being brought to a conclusion, and is believed to have been finished in 1093. It is now a military store.

The plan shows that it belongs to the type which we connect with the name of William of Volpiano. It has a nave and aisles of seven bays, divided by six compound piers similar in section to those at Cerisy la Forêt. The capitals have foliated volutes or crockets, and crowns of leaves going all the way round, with projections representing the flower. This type

[1] *Op. cit.*
[2] Bouet, *op. cit.*

Fig. 473.—Caen. Saint Nicholas. South aisle (1080–1093).

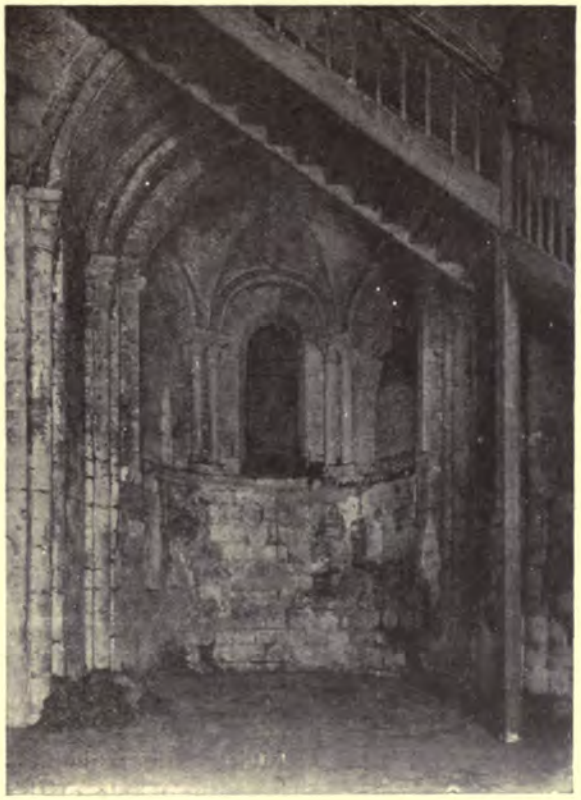


Fig. 474.—Caen. Saint Nicholas. Chapel in south arm of transept (1080–1093).

of capital prevails all through the building. Occasionally we find a human or half-animal head with erect ears (rough work, evidently from the same chisel that produced those in Saint Étienne), that of a lion, and of some indefinable creature.

The aisles (Fig. 473) have unraised cross vaulting. In the XVth century the timbered roofs of the nave and transept were replaced by Pointed vaulting. The interior of the central tower is embellished with two tiers of wall-passages. The transept, on the other hand, has ranges of deeply recessed arches without communication, just below the clerestory. Similar blank arcading decorates the apsidal chapels which project from their eastern sides (Fig. 474). The choir, together with the nave, has a sham triforium corresponding to the aisle roofs, and has cross vaulting like the aisles. The apse has arcading in two tiers, one of which forms a passage. The exterior of the church is strengthened by substantial buttresses, and is decorated with arcading (Figs. 475, 476). The west front is flanked by two towers, originally left unfinished.

Fig. 476.—Caen. Saint Nicholas. Apse (1080–1093).

Saint Nicholas marks another step towards the perfection of the Lombardo-Norman basilica by having the parts east of the crossing covered by cross vaulting with visible arches springing from compound piers, and supported by buttresses outside. Further, it exhibits an entirely new feature in the triforium, which is not an open gallery but a mere series of tall, narrow openings, almost like loops. This arrangement (followed at Boscherville), which had the advantage of consolidating the walls by the omission of wide openings, combined with the shortness of the eastern limb, and the support provided by the adjoining transept and central tower (in itself an important element of stability), must have given confidence to the architect and builders in taking the step, which for them was a bold one, of covering the whole of the eastern limb of the church with cross vaulting. Lastly, in the apse we find for the first time the decorative treatment of

large arches enclosing pairs of smaller blank ones. It was copied immediately afterwards at Boscherville, and later in other churches.

Fig. 475.—Caen. Saint Nicholas. South side (1080–1093).

THE ABBEY CHURCH OF SAINT GEORGES AT BOSCHERVILLE.—As Saint Étienne was the parent of Saint Nicholas at Caen, so Saint Georges at Boscherville is the immediate descendant of the latter, and that is the reason for its inclusion in our survey.

Some writers would make out that the existing building is identical with the cruciform church mentioned in a well-known deed,[1] executed between 1053 and 1066, of Duke William II (1035–1066), and believed to have been erected about the year 1050 by Raoul de Tancarville to replace an earlier chapel, of uncertain age, dedicated to St. George. Others, on the contrary, regard it as a reconstruction of Raoul's church, carried out either when the Benedictine monks of Saint Évroult d'Ouche were installed in it (1114), or in the last years of the XIth century, or rather its last quarter.

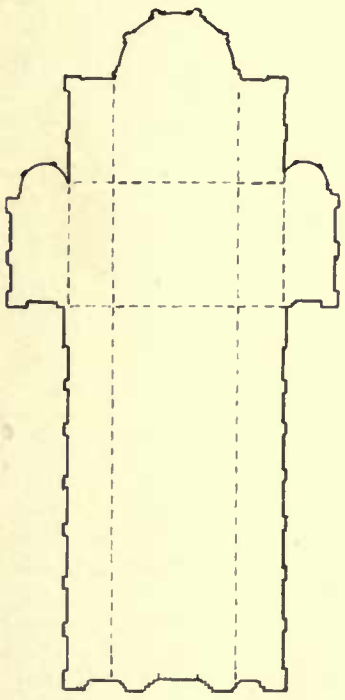


Fig. 477.—Boscherville. Plan of Abbey Church (XIth and XIIth Centuries).

The ground plan (Fig. 477) follows the type of William of Volpiano: a Latin cross; nave and choir with apsidal termination; aisles prolonged east of the crossing, and flanking the presbytery; a transept with minor apses projecting from the east side, and galleries at the ends. With the exception of the clerestory above the triforium, the scheme is a copy of that of Saint Nicholas at Caen: the same triforium, without direct light and formed under the slope of the roof, and similar vaulting for the choir.

The piers of the nave arcades have the same section as those at Cerisy la Forêt and Saint Nicholas at Caen. The pillars in some cases have Lombardic cubical capitals of the Sant' Abondio (1013–1095) type, but mainly capitals of a new pattern derived from a combination of the cubical Byzantine melon form and the aforesaid Lombardic capital. This form, with an entirely new inspiration, displays, in place of the

[1] Besnard, *Monographie de l'église et de l'abbaye de Saint-Georges de Boscherville.*

Fig. 478.—Jumièges. Church of Saint Valentin (XIIth Century).

segments of a melon, a sort of undulation consisting of shallow inverted semi-cones in relief. The primitive form of this capital is to be traced to England, where it appears in the Anglo-Lombardic cubical capitals of St. Albans (1077–1088). There we find cubical capitals with each face exhibiting not a single half round, as in the Lombardic type, but two portions of rounds. This new capital (the real origin of which has not hitherto been pointed out), described in France as "godronné" and in England as "scalloped," while my name for it is the Anglo-Lombardic cubical capital, appears in its earliest form in the abbey church of St Albans, and in more elegant and perfect shape in Gloucester Cathedral. The oldest instance of a scalloped capital, though without the refinement of that at Gloucester, which I can point to in France is to be found on the cruciform piers which carry the first transverse arch in the parish church of Saint Valentin at Jumièges (Fig. 478), built by abbot Ursus (1101–1127),[1] and original from the west front as far as the said arch.

The new capitals of Boscherville, in some cases merely blocked out, are either quite plain, or else exhibit pointed, stiff, smooth leaves, stars, studs, and other ornaments. We also notice capitals decorated with the usual crockets, bunches of

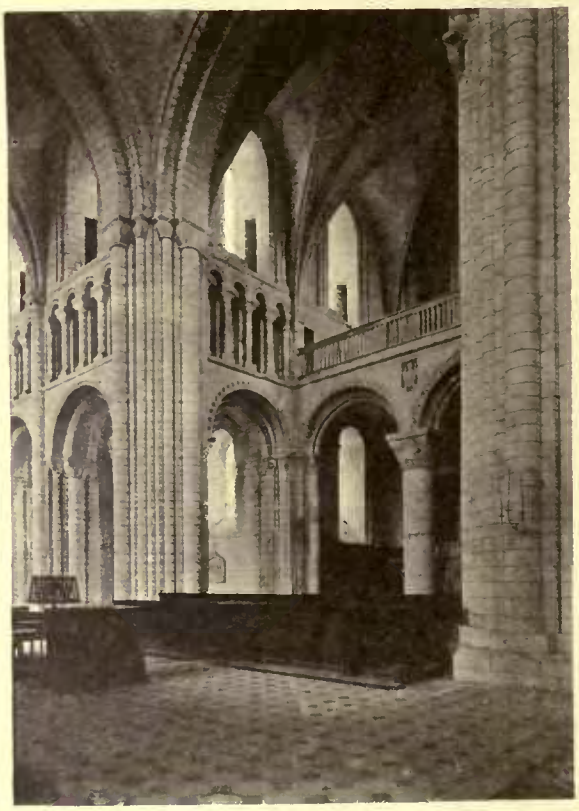


Fig. 480.—Boscherville. Abbey Church. North arm of transept (XIth and XIIth Centuries).

[1] Loth, *Jumièges.*

cauliculi, human heads, stylistic palmettos, interlaced circles, discs, cables, and monsters of all sorts. The foliage is fairly well treated, but not undercut ; the figures, on the other hand, are very uncouth and barbarous. The bases, in some cases decorated with zigzags and other ornaments, are almost all provided with angle-spurs in the shape of claws, leaves, discs, &c.

The body of the church (Fig. 479) was originally spanned by transverse arches with the object of resisting any inward tendency of the walls. Its roof was of timber,

Fig. 479.—Boscherville. Abbey Church (XIth and XIIth Centuries).

the present vaulting having been constructed in the XIIIth century. The side aisles had from the beginning unraised cross vaulting. Above the aisles runs a shallow triforium, constructed under the sloping roof, and originally lighted by narrow oblong openings contained within arcades of four arches to a bay. These have spurred bases and capitals ornamented with semi-cones, foliage, human and animal heads. These openings were blocked up later, perhaps when the present Pointed vaulting was constructed. A service passage is formed in the clerestory. The galleries at the ends of the transept (Fig. 480) have interesting figure capitals (Fig. 481).

The deep apse, encircled by blank and open arcading, was originally covered with

a half-dome, to which ribs have been added at a later date. The two bays of the choir in front of it have ordinary unraised cross vaulting.

Fig. 481. — Boscherville. Abbey Church. Capital in transept (XIth and XIIth Centuries).

The most remarkable features of the exterior (Figs. 482, 483) are the west front (Fig. 484) with its Lombardic portal, the chief ornament of the church, and the arcaded apse.

And now let us turn to the vexed question of the date of Saint Georges. Attempts to fix it in an approximately definitive or, at any rate, an acceptable manner have hitherto been generally unsuccessful owing to a failure to bring the right buildings into comparison with it.

In my opinion, the existing church is certainly not the one mentioned in the foundation charter, which must have been a building of modest dimensions, but a new structure, carried out on a larger scale and under more advanced artistic conditions, before the year 1114, *i.e.* while the Augustinian Canons were still in possession, and after the completion of Saint Nicholas at Caen (1080–1093); in other words, between the last years of the XIth and the first of the next century. With the exception of the west front, it was built all of a piece, and on a predetermined plan: the roll mouldings employed throughout are sufficient to prove this. The violent contrasts sometimes exhibited by the carving are the result of later work, executed when the west front was erected under a new artistic impulse.

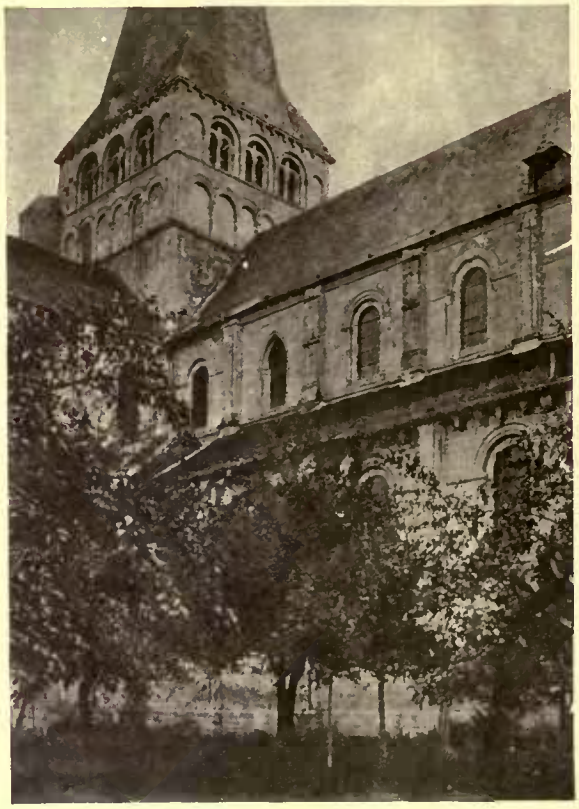


Fig. 482.—Boscherville. North side of Abbey Church (XIth and XIIth Centuries).

It must be later than Saint Nicholas at Caen, as it shows an advance in construction beyond that church in the form of the transverse arches of the nave. Its Anglo-Lombardic scalloped capitals must be later than the erection of the cathedral of St. Albans (1077–1088), where their primitive form appears for the first time. Moreover, the date of the body of the church is earlier than that of the west front. There is too great a gulf between the carvings of the latter with their free movement, and the clumsy forms in the church itself, for them to be contemporary. The front in its turn is considerably later than that of Saint

Étienne at Caen, for the carvings of the portal of Saint Georges (which exhibits multiplied mouldings of much greater richness than the doors of Lanfranc's church) reveal a more developed art and a surer hand than the doorways of Saint Étienne. It is also decidedly later than the chapter-house of the abbey, erected by Abbot Victor (1157–1211) after 1157, where (making allowances for the Pointed forms of the structure) the beautiful carved foliage and figures are very different both in style and execution from the work on the portal in question. Hence we may reasonably assign it to the first years of Abbot Louis (1114–1157) (". . . . ingenii sanctitatisque fama celeberrimum clarissimumque . . ."[1]); and to it, together with the re-working of some of the carving in the church, will refer the words "ecclesiam ampliare et meliorare" in the well-known charter of Henry I of England (1100–1135).[2]

Fig. 483.—Boscherville. East end of Abbey Church (XIth and XIIth Centuries).

Fig. 484.—Boscherville. West front of Abbey Church (XIth and XIIth Centuries).

Saint Georges marks an advance in the principles of equilibrium and construction beyond Saint Nicholas at Caen. The introduction of cross arches with walling above them served to bind the walls together, and also to provide a solid support for the roof; in case of fire, too, they would prevent the flames from spreading, and the nave walls from falling in. A very early instance of such arches, which form the germ of a revolution in the system of covering a church—the substitution of stone for timber—is to be seen in San Miniato al Monte, near Florence (1013); and the primitive church of SS. Felice e Fortunato, near Vicenza (985), provided a still older one.

[1] Gaignières, *Travail de dom Michel Germain—S. Georgii de Bacherivilla monasterii primordia et nostram ad aetatem eventus.*

[2] Deville, *Essai hist. et descript. sur l'église et l'abbaye de Saint-Georges-de-Boscherville.*

We should notice also on the bases the free use of the characteristic protective spurs, which are not met with in Normandy before the second half of the XIth century.

Lastly, the blank arcading which decorates both the interior and exterior of the apse of Saint Georges recalls an ancient circular structure treated in the same way—the vestibule of the "Piazza d'Oro" in Hadrian's Villa at Tivoli (125–135) (Fig. 485). This vestibule is of no small importance in the history of architecture, for we may be sure that some Roman building of the same kind, derived from that in Hadrian's Villa, was the original which served as a model to the builders of the first mediaeval apses decorated with blank arcading.

Fig. 485.—Tivoli. Villa of Hadrian. Vestibule of the "Piazza d'Oro" (125–135).

* * *

The mention of Hadrian induces me to lay before the reader an original view of the Emperor and of the manner in which he influenced the buildings erected by him. My object is to bring into relief one of the eminent qualities of an illustrious ruler whose deficiencies are usually more noticed than his estimable sides, viz. his ability as a master architect. This has, indeed, been previously suggested,[1] but as yet the facts have never been established.

Aelius Spartianus[2] states that Hadrian was well versed in arithmetic, geometry, painting, and every department of art. His capacities as a geometrician and an artist are confirmed by other ancient authorities.[3] [4] From a passage in Dio Cassius, where he relates that Hadrian sent his plans for the Temple of Venus and Rome to Apollodorus, we learn that he made his own designs for his buildings. There is therefore no room for doubt as to his architectural endowments.

Among the structures, wholly or partially preserved, which he created and erected, the most important is the Pantheon at Rome, proved by recent investigations to be the result of a rebuilding carried out between 120 and 124. The fact might have been arrived at long ago if the formulas used by Spartianus—"instauravit, fecit, aedificavit, exaedificavit, extruxit"—had been correctly interpreted. For the Pantheon falls under the formula "instauravit," which is used by Spartianus in the sense of "restoration" only in the case of the Forum of Augustus. "Romae instauravit

[1] Lanciani, *The Ruins and Excavations of Ancient Rome.*
[2] *Scriptores Historiae Augustae* (ed. Teubner)—*Aelii Spartiani de vita Hadriani.*
[3] *Historiae Romanae Scriptores—Sexti Aurelii Victoris Epitome.*
[4] *Dionis Cassii Cocceiani Historia Romana* (ed. Teubner).

Pantheum, Saepta, basilicam Neptuni, sacras aedes plurimas, forum Augusti, lavacrum Agrippae." Whereas, in the case of the other pre-existing buildings which we are told that he rebuilt, it has the meaning of "building afresh" or "reconstruction." As a matter of fact, rebuilding took place in the case of

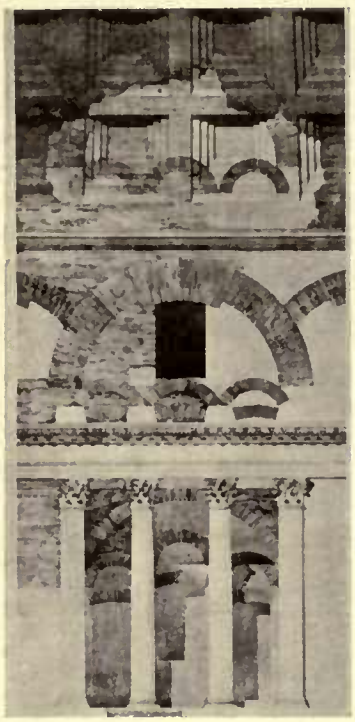


Fig. 486.—Rome. Pantheon. System of relieving arches (120-124). (*From Beltrami, "Il Pantheon."*)

the Pantheon, which had been finished by Agrippa in 27 B.C.;
the Saepta Julia, begun by Julius Caesar and completed by Agrippa in the last named year;
the Basilica of Neptune, another work of Agrippa of the year 26 B.C.;
the Baths of Agrippa, erected by him in 19 B.C.

The other expressions, on the contrary, are used for the structures of which Hadrian was the creator as well as the builder. Such, for instance, as

his Mausoleum with the bridge leading to it (136);
the Temple of Trajan in that Emperor's Forum;
his Villa at Tivoli (125–135);
the Basilica which he erected in honour of Plotina near Nîmes;
the monument raised by him to the memory of Pompey at Pelusium.

The lofty dome of the Pantheon was an object of admiration from ancient times onwards. Ammianus Marcellinus[1] bears testimony to this in his account of the notable things seen at Rome in 357 by the Emperor Constantius (337–361). The investigation of its organic structure made in 1892 and 1893[2] revealed the masterly system of relieving arches which rendered possible the construction and ensured the stability of the wonderful pile (Figs. 486, 487). I will only remark that, so far as my researches have gone, I have never found in a dome or half-dome of earlier date than the Pantheon any use of relieving arches or even of mere ribs; so that the employment of a skeleton framework in vaults of circular form is due to Hadrian.

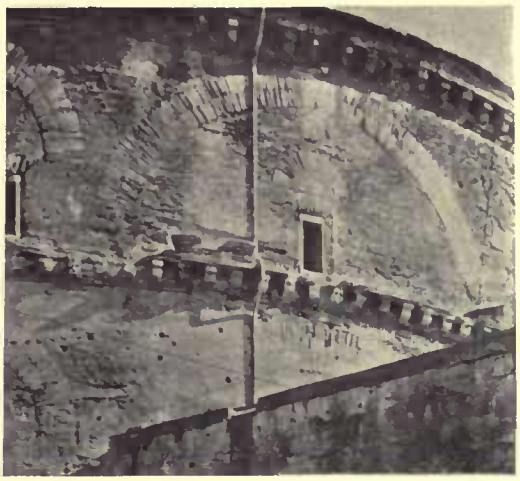


Fig. 487.—Rome. Pantheon (120–124).

Next to the Pantheon, in the new constructive and static features which it

[1] *Ammianus Marcellinus* (ed. Teubner)—*Res gestae*, xvi, 10.
[2] Beltrami, *Il Pantheon*.

presents, comes the Villa Tiburtina, which excited the wonder of Spartianus. Among them we note :—

I. The idea of cross vaulting springing from corbels, to be seen in the Great Baths, for which we may refer to Fig. 120.

II. The half-dome in the Serapeum, with alternate concave and flat compartments. There is no record of any earlier instance of this treatment. And we cannot accept the suggestion that it is a reproduction of some original in the temple of Serapis at Canopus. It is true that Hadrian derived his general idea from the famous Egyptian sanctuary, but that does not imply that he copied it in every detail. Spartianus, in fact, does not refer to any such slavish imitation. "Tiburtinam villam mire exaedificavit, ita ut in ea et provinciarum et locorum celeberrima nomina inscriberet, velut Lycium, Academian, Prytanium, Canopum, Picilem, Tempe vocaret. Et, ut nihil praetermitteret, etiam inferos finxit."

III. The conical raccords to which I have called attention in connection with the baptistery of Galliano.

IV. The vestibule of the "Piazza d'Oro." It is an octagonal hall, with recesses alternately round and rectangular, two of which form the entrance and exit. The plan reproduces that of two rooms in the "Domus Augustana" on the Palatine. In the interior, the re-entrant angles contained shafts (now gone, but the sockets remain) supporting the semicircular arches which carried the compartments of the cupola. The latter was pierced by a round opening in the centre. On the outside, corresponding to the shafts within, are piers (about 1 ft. 4 in. × 1 ft.), from which spring arches rising as high as the base of the cupola. These arches served four purposes. They met the oblique thrust of the arches inside ; they strengthened the cupola at its base ; they formed a facing to the walls, supplementing their very moderate thickness of some 1 ft. 8 in., with considerable economy of materials and expense ; and they added grace and elegance to the structure.

I am unable to point to any earlier vaulted building in which such sound principles of making the forces of resistance depend on their distribution and not on mass were illustrated. Nor can I refer to any earlier example of a dome composed entirely of compartments.

On the model of the vestibule rose another work of Hadrian's (in all probability), which would naturally follow the first experiment made at Tivoli, viz. the rotunda, called by Alò Giovannoli[1] in a view published in 1619 the "Tempio di Siepe," which stood near Hadrian's Temple of Neptune. This building was converted into Santo Stefano del Trullo, and demolished in the time of Pope Alexander VII (1655–1667).[2]

Lastly, comes the Temple of Venus and Roma at Rome (121–135), which was finished by Antoninus Pius, damaged by fire in 307, and restored by Maxentius (307–312).

The singular plan of two sanctuaries with their apses back to back, strengthened at their point of contact with massive buttresses, and the roof formed throughout of barrel vaulting some 68 ft. in diameter, make up a whole of absolute originality for that age, so far as temple architecture is concerned. And it is not difficult to understand the unfavourable judgment passed on it by Apollodorus when Hadrian, during the progress of the work, sent him the plans in order that he might see that buildings on a vast scale could be erected at Rome without his assistance. Some ill-feeling already existed between them. We may be sure that Hadrian had

[1] *Vedute degli antichi vestigj di Roma.*

[2] Armellini, *Le chiese di Roma dal sec. IV al XIX.*

not forgotten or forgiven the insult he had received in the presence of Trajan when, according to the story in Dio Cassius, the Syrian, unaware of the young man's genius, had told him to "go away and paint pumpkins."

Moreover, the Greek architect brought up in the theory of elegant flat-roofed architectural compositions, so far as basilicas and temples were concerned, of which he had produced so notable an example in the Forum of Trajan at Rome ("singularem sub omni caelo structuram"[1]), must have thought the design conceived and the constructive methods adopted by the Imperial architect at least inharmonious and possibly extravagant. And this quite apart from the unfavourable criticisms which Dio tells us he made on the building.

Here was more than a quarrel between two great architects: it was a battle between two schools, the Roman and the Greek, placed as they were at opposite poles. The one, the representative of a new people, serious, sturdy, practical; capable of conquering a world and impressing a unity upon it: the other, the expression of an old race, restless, unstable, but penetrated with the sense of proportion and beauty. It was the clash of two architectural styles. The one new, finding its chief expression in Baths and Palaces; based essentially on vaulting and its combination, stability, and equilibrium; deriving its source of vitality from its own nature and not from the liberal aid of the minor arts; capable of inexhaustible development leading to the production of new styles. The other, mainly an architecture of temples, carried by the Greeks to a superlative degree of beauty, but by this time fossilized and incapable of giving birth to new treatments.

The buildings raised by Hadrian which we have examined are the main exponents of vaulted construction, carried out scientifically, in the Roman Empire during the IInd century. And it was to the impulse given by the Emperor-architect to the building art ("in omnibus pene urbibus aliquid aedificavit"[2]) that a feature of capital importance for vaulted architecture was due. For it was in the time of Hadrian (who has been described as the only man of genius among the Roman Emperors[3]) that the ribs which had previously been used by the Romans in arches and barrel vaults, were first applied to cross vaulting. And this is not all. These diagonal ribs, very interesting examples of which are provided by the substructions of the Palace of Septimius Severus (203) and the Imperial *Pulvinar* looking on to the Circus Maximus at Rome, with double or single "chains" of brick, while the Baths of Diocletian present striking instances with two chains and compartments in brickwork filled in with rubble, were also used in a new way by making them stand out on the intrados of the vault, as may be seen in the "Sette Bassi" Villa near Rome. And this form was the precursor of the principle of vaulting in the Lombardic and Pointed styles.

* * *

Our account of the Norman churches must be supplemented by the description of another which, though not in Normandy but close to the borders of southern Burgundy, nevertheless belongs to the Lombardo-Norman style, and was the work of the same monastic order which produced the founder of that style, William of Volpiano. This building, as being the most complete expression of the science of construction as practised by the Cluniac monks and French builders at the

[1] *Ammianus Marcellinus*, xvi.
[2] *Scriptores Historiae Augustae—Vita Hadriani.*
[3] Stuart Jones, *The Roman Empire.*

close of the XIth and the opening of the following century, furnishes a sure guide for estimating the real conditions of French ecclesiastical architecture at that time, and also for testing the much-vaunted influence of the School of Cluny and of French art generally on the evolution and perfection of the vaulted Lombardic basilica.

THE ABBEY CHURCH OF CLUNY.—The original church of the abbey founded in 910[1] by William the Pious, Duke of Aquitaine (887–918), and the abbot Berno (910–927), was a mere chapel. When this became too small for the ever-growing community, a larger structure (still preserving the old one) was begun under Abbot Aymar (942–965), finished by Majolus (948–994), and dedicated in 982. This was known in later times as "Saint Pierre le Vieux," and remained standing, though it had suffered a good deal, till the days of the abbey's destruction. This church, in addition to its central tower, had two flanking the west front, an idea which Majolus may have derived from the bell-towers of the northern façade of St. John Lateran at Rome, at least as old as the time of John XIII (965–972).

Fig. 488.—Cluny. Abbey Church. South arm of main transept (1089–1130).

But even this in course of time no longer sufficed for the great concourse of monks for whom room had to be found in the choir, nor was it consonant with the splendour of the monastery. It was under these circumstances that Abbot Hugo (1049–1109) took in hand (1089) the erection of the colossal edifice which forms our subject. The monk Hezzel, formerly a canon of Liège, is said to have the credit of being the author of the designs. In 1095 Pope Urban II (1088–1099) consecrated the high altar, which stood a little east of the second crossing—a fact throwing light on the progress of the works, which, according to Marrier, took twenty years to finish. Really they must have taken longer, seeing that the dedication by Innocent II (1130–1143) only took place in 1130, though one of his predecessors, Callixtus II (1119–1124), had been at Cluny in 1120.[2] In front of Hugo's church there was added in 1220, under Abbot Roland I, a narthex planned like a church with nave and aisles.

Of the building, the largest monastic church in Christendom, and once thought fit to be a "deambulatorium angelorum," as well as of Roland's addition, the whirlwind of the Revolution in the XVIIIth century swept away like dust so large

[1] Bruel, *Recueil des chartes de l'abbaye de Cluny.*

[2] Jaffé, *Regesta pontificum Romanorum.*

a part that in 1811 all that remained was the portal of the west front of the narthex with its rose window flanked by two square towers, some arches of the nave vaulting, three bell-towers, the columns of the choir, the apse in an almost perfect state, and, finally, some of the chapels which had been added later to the aisles.[1] [2] [3] [4] [5]

At the present day Hugo's church is represented by so much of the south arm of the main transept as projects beyond the line of the outer aisle, with its octagonal tower and staircase tower; the angle where the outer aisle wall meets the south arm of the lesser transept, and some remains of the latter. The main transept (Fig. 488) is decorated with arcading, and has a barrel vault. From its eastern face one of the two original apses still projects. The octagonal tower belonging to it rests on hood-shaped pendentives. The capitals are Corinthianesque with conventional foliage, and, in some cases, roses and monsters. These figures disprove the arbitrary assertion that the monster figures of the Lombardic School were excluded by the School of Cluny. The capitals are designed and carved with freedom, and are boldly and sometimes completely undercut. One in particular, with foliage and rampant monsters, is admirable.

Fig. 489.—Cluny. Abbey Church. South arm of main transept (1089–1130).

On the exterior (Fig. 489) the tower is enriched with arcading and arched corbel courses. The surviving apse, on the other hand, has shafts round its circumference, while the side walls of the transept have lesenas in their upper part. A large staircase tower projects from its south-west angle.

With these data, with the illustrations and only too brief description of Mabillon[6] (Fig. 490), and with the information given by Lorain,[7] we may form a clear idea of Hugo's basilica. It consisted of a nave and choir with double aisles, regularly orientated, and had the form of an archiepiscopal cross, *i.e.* it possessed two transepts, one larger than the other. The length from the west front to the end of the apse was some 443 ft., and the breadth about 131 ft. The nave was about 32 ft. wide between the piers, the inner aisles over 19 ft., and the outer about

[1] Marrier, *Bibliotheca Cluniacensis—Vita sanctissimi patris Hugonis abbatis Cluniacensis.*
[2] Mabillon, *Annales Ord. S. Benedicti.*
[3] Lorain, *Histoire de l'abbaye de Cluny.*
[4] Pignot, *Histoire de l'Ordre de Cluny.*
[5] Sackur, *Die Cluniacenser.*
[6] *Annales Ord. S. Benedicti.*
[7] *Op. cit.*

13 ft. They were separated by compound piers with a uniform diameter of about 8 ft. The nave, which had pointed arches, was covered by a barrel vault rising to a height of over 98 ft. above the floor of the church. Over each of the longitudinal arches were two tiers of round-headed arcading, three arches to a bay. According to Lorain, the lower, which contained windows, had piers, and the upper, which was blind, had shafts. The inner aisles had also barrel vaults nearly 60 ft. high, and pointed arches. The same was the case in the outer aisles, which were over 39 ft. high. Vaulting of the same kind (though Pignot [1] erroneously talks of cross vaulting) was continued in both transepts, of which the larger measured over 217 ft. by about 32 ft., while the smaller was above 108 ft. long, and somewhat wider than the other. The tiling of the roof rested directly on the extrados of the vaulting without any intervening timber work. The presbytery, with an apsidal termination, was supported by lofty ancient columns brought from Italy, with pointed arches springing from them, and was covered by a barrel vault and half-dome.

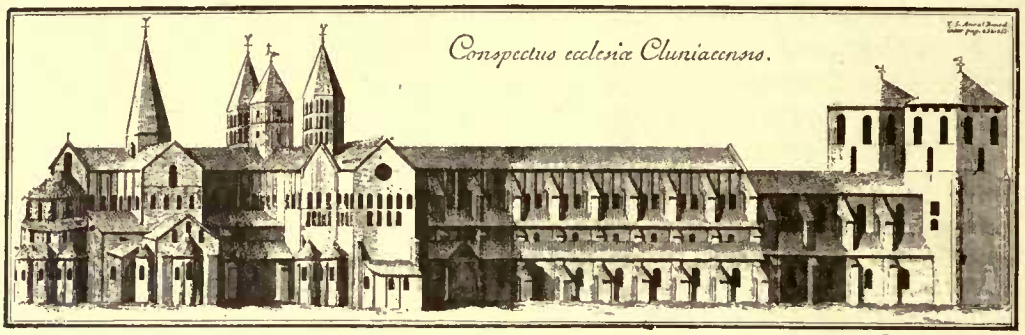


Fig. 490.—Cluny. Abbey Church (1089–1130). (*From the "Annales Ordinis S. Benedicti."*)

The pointed arch was used for all the structural parts of the building, while the round arch was confined to the doors, windows (splayed on both sides), and internal arcading.

From the ambulatory surrounding the presbytery and forming a prolongation of the inner aisles opened five radiating chapels, each vaulted with an elongated half-dome. Three towers rose on the line of the main transept: a square one exactly over the crossing, and two octagonal ones above the arms. The latter, to judge from the one that remains, formed at their base an octagonal cupola resting on hood-shaped pendentives. In the case of the square tower the dome was probably circular, and at a height of about 118 ft. above the floor of the church. A single tower rose above the second crossing which formed the upper bar of the cross. All these towers had pyramidal roofs covered with slating.

The exterior of the walls of the nave, lesser transept, and part of the larger one, was broken by pilasters. Both nave and aisles were strengthened by substantial vertical buttresses corresponding to the arcades within. Those of the nave and outer aisles were further supported by flying buttresses, added, it is thought, in the XIIIth century to increase the resistance to the pressure of the vaulting, over-weighted by the tiled roof resting directly upon it, and consequently of weakened stability.

Of the three towers of the principal transept, the surviving one has been described above. The view in Mabillon shows that the corresponding tower over the north arm

[1] *Op. cit.*

had three stages of arcading, instead of only two like the southern, and that the central tower also had two. The tower over the minor crossing was of one story only, and undecorated.

The west front contained a Lombardic portal with four jamb shafts on either side, surmounted by a range of arcading resting on pilasters, of which the central arch was pierced and lighted a small chapel partly formed in the thickness of the wall, while part of it projected into the nave. The arches on either side of it formed niches. This range of blank arcading was the earliest appearance of this form of decoration on a church front in France.

Having completed our description, let us see what new features are presented by Hugo's basilica. I confess that I cannot discover a single one. The double transept is not one ; here due to the necessity of providing room for a large number of monks in the choir. As a matter of fact, the view of Angilbert's basilica of Saint Riquier in Mabillon[1] makes it clear that the two great lantern towers, flanked in either case by a turret staircase, rose above the crossing of two transepts, which were obviously of the same date as the central towers, as both show the same motive of "oculi," these being blank in the towers and open in the transepts, and also the same type of roof. Again, the church of Saint Remy at Rheims, rebuilt by Archbishop Turpin (756–802) and finished by Hincmar (845–882), who dedicated it, according to Flodoard, in 852, had two transepts, one of which included a tower, and a large two-storied tower at the west front, as we learn from an illustration of a bas-relief on the tomb of the said Hincmar (reproduced in Marlot's "Mémoires," published in 1895 by the Academy of Rheims) which appears to represent the dedication, and contains a figure of the Emperor Charles the Bald (843–877) holding a model of the church. Lastly, St. Michael at Hildesheim, completed in 1033, possesses two transepts with, in each case, a tower over the crossing.

Nor is the arrangement of chapels radiating from the arcaded ambulatory round the apse original, for its prototype is to be found in the destroyed basilica of Saint Martin at Tours, the most famous sanctuary in the whole of Gaul, though not the church erected by Bishop Perpetuus (460–490) to replace the earlier one built over the tomb of St. Martin, first bishop of Tours (371–397), by St. Britius (396–443), and dedicated about the year 470—the subject of the eulogies of Sidonius Apollinaris,[2] and of a brief description by Gregory of Tours.[3] For though the testimony of the Frankish historian shows that the "absida tumuli," or "absida corporis," or "absida sepulchri" in the church was surrounded by an atrium—"hoc in atrio quod absidam corporis ambit"[4]—it does not follow that the atrium itself was surrounded by radiating apsidal chapels, as has been imagined.[5] Perhaps this "absida" was something like the "absida lignea"[6] over the tomb of St. Benignus at Dijon, but constructed in masonry, seeing that, during the fire of 796, Alcuin was able to prostrate himself on the pavement in front of the saint's tomb and pray that the flames might be stayed, without receiving any harm.[7] Unless, indeed, the "absida" were an arcaded apse enclosed by an ambulatory, after the fashion of that in San Sebastiano outside the walls of Rome (367–384). In any case, only one apse projected from the body of the

[1] *Acta Sanct. Ord. S. Benedicti—Vita S. Angilberti abbatis Centulensis.*
[2] *Mon. Germ. hist.—Sidonius Apollinaris, Carmina.*
[3] *Mon. Germ. hist.—Gregorius episcopus Turonensis, Historia Francorum.*
[4] Migne, *Patr. Lat.*, Vol. 71.—*S. Georgii Florentii Gregorii de miraculis S. Martini episcopi.*
[5] C. Chevalier, *Les fouilles de Saint-Martin de Tours.*
[6] D'Achery, *op. cit.—Chronica S. Benigni Divionensis.*
[7] *Mon. Germ. hist.—Vita Alcuini.*

basilica of St. Martin, and that formed the chancel. This alone is mentioned by Gregory of Tours, and its existence is implied in the story of the robbers who broke into the church and carried off a rich booty.[1]

The church of Perpetuus, which suffered from fire in the time of Bishop Euphronius (555–572) and was restored by him, was sacked by the Saracens in 732. Scarcely had it been restored, when a new fire damaged it in the days of Alcuin, who had been prefect of the palace of Charles the Great, and afterwards became abbot of Tours. He gave it a new roof.

A coin of the time of Charles before his coronation as Emperor (768–800)[2] shows the front of the church as it existed in the second half of the VIIIth century (Fig. 491). Later, the Emperor himself rebuilt it, but not entirely, as may be inferred from another coin struck under Louis the Pious (814–840), showing the same church front as that of the days when Charles the Great was still only a king. On this occasion a lofty bell-tower was erected,[3] which some would make

Fig. 491.—Coin of St. Martin of Tours (768-800).

Fig. 493.—Coin of St. Martin of Tours (893–929).

out to be identical (except for the topmost story) with the existing "Tour Charlemagne" (Fig. 492) which stands near the present church of Saint Martin. This, however, is due neither to the Emperor, nor to the treasurer Hervé, as others argue, but is rather one of the results of the work undertaken after the fire of 1096. The architectural and artistic decoration of the two stages above the basement exactly suits the last years of the XIth and the first of the next century. The highest stage in the Pointed style is the result of alterations in the XIIIth or XIVth centuries.

On several later occasions Saint Martin was set on fire and injured by the Normans between 853 and 903, and consequently several times repaired, and between 904 and 918 radically restored or rather rebuilt, as was the monastery. A coin struck in the time of Charles the Simple (893–929) shows quite a different front from that of the VIIIth and IXth centuries, and implies a reconstruction (Fig. 493). The basilica of the time of Charles the Simple was devastated by a fire in 994, according to Maan[4]; but Hervé de Buzançais, treasurer of Saint Martin from 1014 onwards,[5] at once took in hand its rebuilding, and the new structure was dedicated by Bishop Hugo (1007–about 1023) in 1014, or, according to Ademar, 1020.[6] Mosnier[7] states that Hervé rebuilt only that part of the basilica which covered the saint's tomb, *i.e.* the east end. Maan, on the contrary, describes the old walls being pulled down before the new church was built up. However this may be, what is of importance for us to notice is that to Hervé must be assigned the oldest traces of the choir with its five radiating chapels, which came to light during the recent erection of the new Saint Martin, when I was able to inspect them.

[1] *Mon. Germ. hist.—Gregorius episcopus Turonensis, Historia Francorum.*
[2] C. Chevalier, *op. cit.*
[3] [4] Maan, *Sancta et metropolitana ecclesia Turonensis.*
[5] U. Chevalier, *Répertoire des sources historiques du moyen âge.*
[6] *Mon. Germ. hist.—Ademarus, Historiae.*
[7] *Historia S. Martini.*

Maan, again, can scarcely be trusted when he refers to an increase of length in the new church. This choir was afterwards rebuilt, first after the fire of 1096, then again after 1175, and finally after 1202. In Italy the plan does not occur till 1032, in an elementary form, in San Flaviano at Montefiascone, and in its full development in the cathedral of Aversa.

Nor was there anything original in the small apses which formed the termination of the transepts. Rome and Roman Italy afford very ancient examples of cruciform buildings with the arms ending in a curved projection. An examination of Montano's [1] work will show several such.

To my mind, an impartial estimate of the church of Cluny reveals nothing really notable except its imposing proportions and the immense vaulted space covered by it—immense, however, only in the sense of length, for the nave was not so wide as that of Sant' Ambrogio at Milan. But this does not detract from the great achievement of Hezzel in raising at that date a building of such size entirely in masonry. The carving is also remarkable.

The church itself, then, shows that the influence which it is supposed to have exercised on the development and completion of the Lombardic organism is imaginary. But there were directions in which it had an influence, sometimes of considerable importance.

Thus, the free use of the conical pendentive, which previously had barely made an insignificant appearance at Jumièges (1040–1066), was the starting point for its diffusion through the country, where in the district between the Loire and the Garonne it prevails. It is precisely to the end of the XIth century that the cupola of Saint Étienne at Nevers (1097) with its pendentives of this type belongs; while in the XIIth century we get them in Notre Dame at Avignon, Saint Philibert at Tournus, Notre Dame at Beaune, the church at La Charité, Notre Dame du Port at Clermont Saint Hilaire at Poitiers (which originally had a wooden roof), &c.

The use of the pointed arch, though it was anomalous and not systematic, gave rise to the Transitional or Lombardo-Pointed style, and was thus the starting point for the Pointed style proper.

Fig. 492.—Tours. So-called "Tour Charlemagne" (XIth, XIIth, and XIIIth or XIVth Centuries).

Again, we may be sure that the lofty walls of the nave, with their two tiers of arcading rising above arches of excessive height, formed a subject of study, of reflection, of imitation, for the earliest architects of churches in the Pointed style with their soaring naves, quasi-triforiums, and wall galleries.

As for the carving, to judge by the little that has been preserved, it is certainly, in the case of some of the figure subjects, not a whit inferior to the best Italian work of the same date. I refer especially to a number of capitals, eight superb ones

[1] *Op. cit.*

among them, now collected in the Museum near to where Roland I's narthex once stood. They are of Corinthian type with figures, the conventional foliage being

Fig. 494.—Modena. Duomo. Crypt (1099–1106).

treated in high relief and sometimes completely undercut, and are executed in a very easily worked stone.

On one of them appear Adam and Eve before the Fall, wearing the characteristic cylindrical Jewish cap, also to be seen on the common head belonging to the bodies of a pair of winged centaurs carved on a capital in the old part of the crypt of the cathedral at Modena (1099–1106) (Fig. 494), and represented on many of the sculptured sarcophagi in the Lateran Christian Museum. The motive of two quadrupeds with a single head was derived from the Etruscans, who employed it not only on vases but also on carved panels. One of the compartments of a piece of archaic Etruscan carving in the Archaeological Museum at Florence contains a pair of lions with a single head (Fig. 495). The Romans also used it, as may be seen on a capital illustrated by Montano,[1]

Fig. 495.—Florence. Archaeological Museum. Portion of Etruscan carving from Corneto Tarquinia.

[1] *Op. cit.*

showing two winged animals united by a single head which takes the place of the flower on the abacus.

On another capital, which seems to me the finest of all, David is represented playing the harp (Fig. 496). The figure is treated with grace, in an easy and lifelike manner, showing refinement and correct proportions, especially in the extremities. The pose is natural, and the drapery intelligently arranged. Taken all in all it is not inferior to the figures of the same date executed by Wiligelmus or Guglielmus for the façade of the cathedral of Modena (Fig. 497). In these, while we can admire, for instance in the subjects from the beginning of Genesis, the grand style and majestic air of the figures, which sometimes (*e.g.* the man killed by Lamech's arrow) have a natural look not found in the faces of the figures at Cluny with their more forced expression, on the other hand one cannot help noticing the general lack of proportion between the heads and bodies, and also in the

Fig. 496.—Cluny. Museum. Capital from Abbey Church (1089-1130).

Fig. 498.—Cluny. Museum. Capital from Abbey Church (1089-1130).

Fig. 497.—Modena. Sculpture on the façade of the Duomo (XIIth Century).

feet, even when covered. Moreover, they have a rigidity from which the David of Cluny is free. In a third capital, with God calling Adam after the Fall (Fig. 498), the figures are inferior both in quality of line and modelling to the best of the work at Modena.

The church of Cluny was not alone in its failure to show any contribution towards the evolution and perfection of the Lombardic vaulted basilica ; for the same thing is true of the rest of the French ecclesiastical buildings. And this we shall have to substantiate by the evidence of some of the most important dated churches of the country in the XIth and early years of the following century, though not in the Norman districts which we have hitherto dealt with. These we shall briefly compare, taking note of their chronology and special features, with the Lombardic buildings of Italy ; thus obtaining tangible proof that all these French churches were behind the times so far as that development is concerned, when confronted with the creations of the Lombard gilds which showed the way.

THE ABBEY CHURCH OF SAINT PHILIBERT AT TOURNUS is the result of Abbot Bernerius's rebuilding between 1008 and 1019 (the latter being the year of the consecration) of the previous church erected by Abbot Stephen between 960 and 980, and damaged, together with the adjoining convent, by a fire in 1006 in the days of Abbot Vago. This Xth century church in its turn replaced an earlier one.[1]

Fig. 499.—Tournus. Saint Philibert (1008-1019).

Five bays of the church of Bernerius remain. The choir with its crypt, and the two-light openings on the interior face of the two-storied narthex, indicate with their Corinthianesque and varied Composite capitals the partial rebuilding in the early years of the XIIth century mentioned by Robert,[2] and followed by the dedication performed by Calixtus II (1119–1124). The original bays are divided into nave and aisles by very lofty cylindrical piers, each of which carries above its capital a vaulting shaft (Fig. 499). From these shafts spring the uncouth transverse arches which support the barrel vaults over the nave. The aisles, which are of great height, have roughly constructed, ramping, unraised cross vaulting. The side walls are strengthened by external buttresses corresponding to the piers within (Fig. 500).

The church of Tournus is important not only for its place in the history of the development of vaulting, but also because it presents two features, one of which is worthy of special notice.

The first and most important is that of the great cylindrical piers which separate

[1] Meulien, *Histoire de la ville et du Canton de Tournus.*

[2] *Gallia Christiana—Tornusium.*

the nave from the aisles. This form influenced the builders of Sant' Abondio at Como (1013–1095) and of Jumièges (1040–1066), and it was copied at Malvern (1085), where it became the model which was reproduced in so many abbey and priory churches of Great Britain.

The second is the arrangement of the vaulting shafts. It was used later by the builders of Sant' Ambrogio at Milan on the piers, with the object of supporting an arched corbel course to decorate the nave. Afterwards the architects of the cathedrals of Worms and Mainz employed it in the form of half-piers from which to spring the pairs of wall-arches in the nave.

Fig. 500.—Tournus. Saint Philibert. North side (1008–1019).

The chief value of Saint Philibert consists in its system of construction and equilibrium. As we saw, the second church had to be rebuilt after little more than a quarter of a century; and the reason, as the injury caused by fire suggests, was that it had a wooden roof. It was accordingly decided to rebuild it completely in masonry. And it is this decision which demonstrates the real merit of the Burgundian builders.

Anxious to give their work a character distinct from that of the Lombardic style, which at that time was being illustrated by Saint Bénigne at Dijon, then in course of erection (1002–1018), and San Babila at Milan, and desirous of lighting the nave directly, but afraid to spring a longitudinal barrel vault from such elongated piers, they fell back on the inartistic but more stable device of springing from the transverse arches of the nave as many barrel vaults as there were bays, the nave walls being strengthened by buttresses corresponding to the arches. This system, which is of very rare occurrence, had been already followed in the original church of Saint Front at Périgueux, the erection of which was begun[1] by Bishop Froterius (988–991), who was buried in it,[2] a proof that the work must have been then well advanced. The dedication took place in 1047 during the episcopate of Geraldus, who died in 1059. The facts are that the parts of this church preserved in the later rebuilding show that while the nave, which was barely 17 ft. wide, had a wooden roof, the aisles were covered with ramping barrel vaults, one to each bay, parallel to one another and at right angles to the nave, and resting on transverse arches springing from isolated piers and half wall-piers.[3]

It was undoubtedly from Saint Front that the architect of Saint Philibert derived his idea when he adopted ramping vaulting in the aisles. Its function

[1] Sammarthanus, &c., *Gallia Christiana.*

[2] Robert, *Gallia Christiana.*

[3] Verneilh, *L'architecture byzantine en France.*

in the latter case was to abut the transverse arches of the nave, while at the same time the nave was not affected by its thrust. The result was a three-lobed framework of resistance and of thrust ("trilobo di forza") discharged on to the outer walls, almost without need of intermediate supports.

The present church of Saint Front in the Byzantino-Venetian style, with its Oriental derivation through St. Mark's, is a new erection of 1120, and not identical with the fabric of 1047 as some even recent writers imagine.[1] The church of Froterius was burned, together with the whole of the wooden-roofed convent, in the terrible fire of 1120, when even the bells were melted.[2][3] The only parts which escaped were the vaulted aisles.

And all said and done, San Babila at Milan, but little older, already possessed aisles with beautiful raised cross vaulting springing from compound piers, while the nave (though without windows) had a barrel vault, and the thrust of the ribs which interrupted it and supported the other vaulting, was met by an original and scientific system of buttressing.

A great deal of water will have to run down the rivers of France before the French builders succeed in covering directly lighted naves with longitudinal barrel vaulting. And when this does happen, the hour will have almost struck for them to abandon a foreign style, and devote all their energies to the creation, under the guidance of the ruling principles of the Lombardic basilica, and with the assistance of the improvements in vaulting introduced in the nave of Durham Cathedral, of a new national architecture, viz. the Transitional Lombardo-Pointed, out of which the Pointed style pure and simple was developed.

THE CHURCH OF SAINT HILAIRE AT POITIERS was rebuilt after the disastrous fire which destroyed most of the churches of the city in 1018, and dedicated in 1059.[4][5][6][7] Originally it consisted of a nave with double aisles, the former separated from the latter by compound piers and columns alternately, and had a wooden roof. The aisles were separated by columns, and had cross vaulting. The interior face of the side walls presents a cluster of three shafts corresponding to the nave piers, from which spring transverse arches, and a shaft answering to the columns of the aisles and nave, to support the cross vaulting. On the outside these wall-supports are met by buttresses alternately larger and smaller.

When, in 1130,[8] it was decided to vault the nave, owing to the fact that it was some 46 ft. wide, the plan was adopted of lining its interior with arcades resting on clustered piers connected by transverse arches at the level of the clerestory, which was strengthened by an additional facing, and then raising over each bay of this inner structure an octagonal cupola resting on hood-shaped pendentives (Fig. 501).

It is obvious that the only Lombardic features presented by Saint Hilaire are the alternate large and small supports, and the form of the piers, the capitals of which, however, are neither continuous nor Lombardic. The figure capitals (where old) must be ascribed to the XIIth century. The original ones were of two kinds: those with plain crocket leaves, and those with similar foliage above a continuous crown of leaves.

[1] Peyre, *Histoire générale des beaux-arts.*
[2] Delisle, *Ex chronico S. Maxentii.*
[3] Id., *Ex fragmento de Petragoricensibus episcopis.*
[4] Delisle, *Ex chronico Ademari Cabanensis.*
[5] Id., *Ex fragmento historiae Monasterii Novi Pictavensis.*
[6] Id., *Ex chronico S. Maxentii.*
[7] Labbe, *op. cit.—Chronicon S. Maxentii.*
[8] Enlart, *op. cit.*

THE ABBEY CHURCH OF SAINT SAVIN was erected in the time of Duke William III (980–1030) and Abbot Gumbald († 1040).[1] It was designed with nave and aisles separated by cylindrical piers, and the aisles had cross vaulting (which, being the result of the intersection of two perfectly semicircular barrel vaults, is without transverse arches) springing from the nave piers and the corresponding half wall-piers, the latter being strengthened externally by powerful buttresses. The nave, on the other hand, is covered with a continuous barrel vault rising from very low nave walls, and therefore without windows, the thrust of which is met by the aisle vaulting. The whole is covered by a single gabled roof.

The only Lombardic feature in this church is the familiar idea, derived from the Roman tradition, of strong external buttresses to resist the thrust of the cross vaulting. Whereas, in the contemporary San Flaviano at Montefiascone we already find used in the aisles the essential element of Lombardic architecture—diagonal ribs applied to the cross vaulting.

Fig. 501.—Poitiers. Saint Hilaire (XIth and XIIth Centuries).

THE CHURCH OF SAINT-REMY AT RHEIMS was rebuilt by Abbot Theoderic (1036–1048) in the fifth year from his appointment, after demolishing, owing to its excessive size, the portion of the structure begun by his predecessor Airardus (1005) to replace the older church which had been completed by Hincmar (845–882) in 852. This demolition spared nothing but some of the foundations: "quam basilicam Theodericus, destructa ob nimiam aedificii molem ea quae ab Airardo incoepta fuerat, aedificare aggressus, Herimaro successori perficiendam reliquit."[2] It was finished by his successor Herimar, who completed the north arm of the transept and erected the southern one. He also constructed the roof. The consecration was performed by Pope Leo IX in 1049. The church was enlarged by

[1] Sammarthanus, &c., *Gallia Christiana—Abbatia S. Savini ad Wartimpam.*

[2] Mabillon, *Annales Ord. S. Benedicti.*

Abbot Pierre de Celles (1162–1182), who replaced the narthex by two bays. He also remodelled the west front, raised the side walls of the nave, and threw across them, as also in the transept, Pointed vaulting, which involved an alteration in the nave piers. Lastly, he rebuilt the choir.[1][2][3][4]

Of the original church there survives the nave, the transept, and the remains of the choir. The nave and aisles are separated by massive pillars formed of

Fig. 502.—Rheims. Saint Remy (XIth and XIIth Centuries).

a number of shafts clustered within a circle, and two compound piers, preceded by two bays in the Pointed style (Fig. 502). Everything indicates, as has been suggested, that the piers were at first plain and cylindrical instead of being encircled by clustered shafts as now. This would explain the difference between the rude capitals with triangular indentations (Fig. 503) and those with foliage and figures, which would be the result of alterations between 1049 and 1162, when also the

[1] Marlot, *Metropolis Remensis historia.*
[2] Delisle, *Ex chronico S. Benigni Divionensis.*
[3] Id., *Ex historia dedicationis ecclesiae S. Remigii.*
[4] Gosset, *La basilique de Saint-Remy à Reims.*

single-arch openings of the triforium springing from rectangular piers were divided into two by shafts with foliage capitals evidently of another date, though earlier than the capitals of the time of Pierre de Celles.

The aisles (Fig. 504), which were afterwards cross vaulted and bear traces of alteration on two occasions, originally had wooden roofs like the triforium. The vaulting we see in the nave is not that of Abbot Pierre, but a sham vault put up in the last century, when at the same time some bays of the transept vaulting were rebuilt, as well as a considerable part of that in the aisles and triforium.

Fig. 503.—Rheims. Saint Remy. Capitals in the nave (XIth Century).

The transept also has aisles, with galleries above. The piers were originally either cylindrical, or quadrangular with attached members: in the one case a half-column and a pilaster, in the other a simple pilaster. The ground floor had barrel vaulting interrupted by transverse arches springing from cylindrical or quadrangular piers. The galleries and central space had timbered roofs.

The aisles terminated at the east in small apses (partly destroyed) flanking the rectangular sanctuary.

Externally, the south side of the nave (the only one that is free) is strengthened by semi-cylindrical buttresses, which were altered when the nave walls were raised

Fig. 505.—Rheims. Saint Remy. South side (XIth and XIIth Centuries).

for the construction of the vaulting. At the same time the range of round windows was formed at the top (Fig. 505).

The old Saint Remy exhibits no Lombardic features, displays an art which is old-fashioned compared with that of the contemporary church at Cerisy la Forêt

Fig. 504.—Rheims. Saint Remy. South aisle of nave (XIth and XIIth Centuries).

(1030–1066), and contains no element of service to the Italian gilds for the development of the Lombardic vaulted basilica. We find, however, one feature which is new for France: the transept aisles and galleries continuing those of the nave. This arrangement must have been suggested by St. Maria im Capitol at Cologne, which, though it too was consecrated in 1049, appears to have been rebuilt between 1024 and 1030.

THE MONASTIC CHURCH OF SAINT SERNIN AT TOULOUSE was rebuilt after the Cluniac monks in 1083 took the place of the canons, and was consecrated in 1096 by Pope Urban II.[1] Its plan is that of a nave and choir with double aisles, divided by piers of uniform thickness with an engaged vaulting shaft to carry the transverse arches of the nave. The latter is barrel vaulted and without windows. The aisles have ordinary cross vaulting. The transverse arches over the two outer ones started from piers and half wall-piers strengthened by substantial buttresses outside. Above the inner aisles is a triforium covered by a half barrel vault which meets the thrust of the nave vaulting. The outer aisles have half barrel vaults springing from the floor level, forming dark spaces. To each arch of the nave corresponds a double opening above, divided by a shaft, and enclosed by a single arch. Round-headed windows light the outer aisles.

THE MONASTIC CHURCH OF SAINT ÉTIENNE AT NEVERS was rebuilt by William I Count of Nevers (1040–1097), and given, with the convent, to Cluny in 1097.[2] Its plan is that of a nave and choir separated from aisles by compound piers of uniform size, consisting of a square pier with four engaged half-columns, corresponding to which are wall-shafts and external buttresses. The aisles have ordinary cross vaulting, but the nave is covered by a barrel vault divided into sections by large transverse arches kept up by buttresses outside. The nave walls from which it starts are carried up high enough to allow of windows, formed partly in the walls and partly in the base of the vault. Over the aisles runs a triforium with a semicircular vault, which opens on the nave by pairs of arches, divided by a column, and enclosed by another arch.

The church of Rivolta d'Adda had already been given to Pope Urban II (1088–1099), and Sant' Ambrogio at Milan was nearing completion, when Saint Sernin at

[1] Jaffé, *Regesta pontificum Romanorum.*

[2] Marrier, *op. cit.*—*Carta fundationis seu dotationis Monasterii S. Stephani Nivernensis.*

Toulouse and Saint Étienne at Nevers were finished. Now, any one can see at the first glance how different was the organic and constructive conception in the minds of the architects of the two Lombardic churches from that which was before the authors of the two French ones, and how far ahead the former were of the latter in constructive and statical knowledge. This is abundantly proved by the rational system of buttressing employed in the church of Rivolta, which has maintained the integrity of the building in such a wonderful way through the centuries; whereas the cracks in Saint Étienne at Nevers are evidence of unsound construction. And so we have reached the close of the XIth century without having found a single building of certain date in France which can be said to have in any respect shown the way in the creation of the Lombardic style.

THE ABBEY CHURCH AT LA CHARITÉ appears to have been begun by the prior Girardus, who was also its architect, in 1056,[1][2] or 1069,[3] and was dedicated in 1107.[4] It was erected with ordinary cross vaulting for the aisles, supported by internal and external buttresses; while the nave had a barrel vault, crossed by transverse arches, and starting above the clerestory with its round-headed windows.

Fig. 506.—Vézelay. Abbey Church of the Madeleine. Nave (XIth and XIIth Centuries).

THE ABBEY CHURCH OF THE MADELEINE AT VÉZELAY, erected by Abbot Artald (1096–1106), was dedicated in 1104. It was damaged by a terrible fire in 1120,[5][6] but repaired by Abbot Rainald of Semur (1106–1128). The narthex, built and dedicated about 1132,[7][8] must have been the work of his successor.

The body of the church, which belongs to the original work, is divided into nave and aisles (Figs. 506, 507) by compound piers of uniform size, and has unraised

[1] Delisle, *Ex chronico Andegavensi altero.*
[2] Id., *Ex chronico Willelmi Godelli mon. S. Martialis Lemovicensis.*
[3] Id., *Ex chronico S. Maxentii.*
[4] Id., *Sugerius abb. S. Dionysii—Liber de vita Ludovici Grossi regis.*
[5] Delisle, *Ex chronico Vizeliacensi.*
[6] Id., *Ex chronologia Roberti mon. S. Mariani Altissiodorensis.*
[7] Petit, *Descriptions des villes et campagnes du département de l' Yonne.*
[8] Anthyme Saint-Paul, *Viollet-le-Duc, ses travaux d'art et son système archéologique.*

cross vaulting. The bases of the piers are in some cases ornamented with foliage, ovolos, cauliculi, fluting, animals, scroll work, &c. The Corinthianesque capitals

Fig. 507.—Vézelay. Abbey Church of the Madeleine. South aisle (XIth and XIIth Centuries).

display, besides foliage, real or imaginary animals of every description, demons, human beings in repose or conflict, and scenes from sacred story. These carvings, evidently

Fig. 508.—Vézelay. Abbey Church. Portal (XIIth Century).

the work of the same school which produced those at Cluny, with complete undercutting in some cases, while they will not bear comparison with those of the

cathedral of Modena (1099–1106), are superior to those at Rivolta d'Adda and in Sant' Ambrogio at Milan, though we must of course remember the rather easily worked stone used for the church of Vézelay.

The representations of monsters and of hunting and fighting scenes, which run riot on the capitals, show how entirely without foundation is the assertion that the School of Cluny avoided such subjects. On a capital of the first pier to the right, which being near the west end must date from about 1104, appears a centaur with the characteristic cylindrical cap which we noticed in the Museum at Cluny and in the crypt of the cathedral of Modena.

On the outside, the walls had simple pilasters, converted later into the present massive buttresses.

The imposing portal of the nave, divided after the French fashion by a central pier to relieve the weight of the lintel (Fig. 508), shows a marked advance artistically over the carvings inside the church, and is to be referred to the beginning of the works on the narthex. For the fineness of its sculpture its only rivals in Italy are the contemporary portal of the cathedral at Ferrara (Fig. 509), dated by the inscription on the innermost arch in 1135, and that of the church of San Zeno Maggiore at Verona, the rebuilding of which was finished in 1138,[1] both works of Master Nicholas. The front of San Zeno was afterwards pierced by a large rose window (the middle cornice being cut through for the purpose) symbolizing the wheel of Fortune, the carvings of which are certainly to be referred to the works carried out before 1178. This rose window is one of the earliest to be found in Italy, the birthplace of this type of opening. Santa Maria del Vescovado at Assisi furnishes an example of 1163. It was only in 1220 that the church of Cluny received one in the west front of Abbot Roland's narthex.

Fig. 509.—Ferrara. Portal of Duomo (1135).

The two-storied narthex at Vézelay is constructed with arches some of which are round and others pointed, Lombardic piers, and ordinary cross vaulting constructed in rubble, either groined or else ribbed. The narthex has a portal of its own, almost entirely re-worked, the outer archivolt of which rests on the back of a lion with a monster between its paws on one side, and a bull surrounded by foliage on the other. It is the oldest example of an arch supported by half-figures ("protome"), after the Etruscan (as we shall see when we come to Deerhurst) and Lombardic fashion, that France can show.

Some of the capitals in the church and narthex have a suggestion of the Pointed

[1] Cipolla, *Per la storia d'Italia e de' suoi conquistatori nel medio evo più antico, ricerche varie.*

style in the play of the foliage. Similar capitals, still more advanced in character, are found in the cathedral at Modena (a fact to which attention has hitherto not been called), which, with the slender bell and the play of the foliage, anticipate or may

Fig. 510.—Modena. Duomo. Capital in the crypt (1099–1106).

Fig. 511.—Modena. Duomo. Capital in the façade (1099–1106).

even be said to be treated in the manner characteristic of the Pointed style (Figs. 510, 511, 512).

It cannot be said that the first attempt made by the School of Cluny to cover an entire structure of considerable size with cross vaulting achieved a perfectly happy result, for not only did the vaulting of the nave develop cracks and have to be held in by tie rods, the attachments of which are still to be seen, but it became necessary, after the lapse of little more than a hundred years, to secure the stability of the entire structure by the external buttressing to which we have already called attention. While, on the other hand, the church of Rivolta d'Adda, with its ribbed raised cross vaulting, concave at the crown, lighted by windows in the lunette wall spaces, and with its ramping buttresses pierced by arches, still stands to bear witness to its inherent soundness.

Fig. 512.—Modena. Duomo. Capital in the façade (1099–1106).

Some have wanted to make out that the idea of covering the nave of Vézelay with cross vaulting came from Palestine. On the contrary, it was the natural solution of a problem which was always stimulating the energies and efforts of the School of Cluny, eager as it was to pursue an independent course, and anxious to carry out, by ways and means distinct from those laid down by the great Lombardic School, the revolution in the principles of construction and equilibrium which the North Italian gilds had brought about in the Latin basilica. The fact rather is that it was the monks of Cluny who carried the idea to Palestine. New styles of architecture are not produced by magic. Now, neither Palestine nor Syria afford, after the Roman period, a single dated example of a basilica completely covered by cross vaulting in which the cells are constructed in coursed and dressed masonry, and the piers are of the Lombardic type, as for instance in St. Anne's at Jerusalem before their introduction by the Franks after their capture of the city, for there can be no question that they were the builders (with the assistance

perhaps of local workmen) of the churches there which have roofs of that kind. We can thus explain the appearance in Palestine of such structures of perfected type, without having to look there for earlier ones illustrating the necessary gradual development.

The abbey church of Vézelay is a proof that the School of Cluny was still in the first stages of the solution of the problem how to cover churches of large size

Fig. 513.—Angers. Cathedral (XIIth Century).

with a complete system of cross vaulting, at a time when the church of Rivolta d'Adda was ready to serve as the introduction to the first chapter of pointed-arch construction. It was only at the dawn of the Pointed style that this much-vaunted School resolutely entered upon the difficult path leading to the proper arrangement of simple or ribbed cross vaulting; and that period, so far as the northern countries are concerned, did not begin in France, but rather in England. France may lay claim to the imperishable honour of having seen how to unite the Lombardic organism to that fusion of the pointed arch with ribbed cross vaulting which was achieved in Durham Cathedral between 1129 and 1133, perfecting and trans-

forming it in a transitional system which later found its perfect balance and entire harmony in the Pointed style.

Of this Transitional style I will, in conclusion, indicate a few typical examples.

(1) The western towers of the cathedral of Chartres as rebuilt after the fire of 1134. The northern tower was begun in the same year, and it is known that about 1144 the works on the southern one were in progress.[1] The two cross vaults of the ground floor are ribbed, the ribs having a moulding of three rolls.

(2) The abbey church of Saint Denis, founded by King Dagobert about the year 630, refounded by Pippin and Charles the Great, and erected by Abbot Suger (1122–1152), who was also the architect ("instauravit ecclesiam eo schemate"). The narthex, which was the first work undertaken, and the choir were finished in 1140 and 1144 respectively, while the nave was built later than 1144.[2] [3] [4] [5]

(3) The cathedral of Sens, begun about 1140.[6]

(4) The cathedral of Angers (Fig. 513). The vaulting over the aisleless nave, which is nearly 50 ft. wide, was constructed by the bishop Normand de Doué (1150–1153), under whom we find a payment made for this purpose.[7]

[1] Clerval, *op. cit.*

[2] Robert, *Gallia Christiana.*

[3] Musier, *Histoire de Suger abbé de Saint-Denis.*

[4] Migne, *Patr. Lat., Vol.* 186.—*Sugerius abb. S. Dionysii, Libellus de consecratione ecclesiae a se aedificatae.*

[5] Id., *Liber de rebus in administratione sua gestis.*

[6] Lefèvre-Pontalis, *L'architecture religieuse de l'ancien diocèse de Soissons.*

[7] Tresvaux, *Histoire de l'église et du diocèse d'Angers.*

CHAPTER III

ECCLESIASTICAL ARCHITECTURE IN ENGLAND FROM CONSTANTINE TO THE NORMAN CONQUEST

THERE is little to be said about the ecclesiastical architecture of Britain in the period between Constantine's Edict of Milan (313) giving peace to the Christians, and the withdrawal of the Roman legions from the island (411) by the Emperor Honorius's rescript of 410, and from this to the invitation given to the Anglo-Saxons (449). The only vestige that has survived is the remains, barely rising above the ground, of the small basilica which in old days stood near the Forum of the Roman town of Calleva Atrebatum (Silchester). It followed the early Latin plan of a cross without the upper limb and with a very short transept, like the old St. Peter's at Rome. The nave and aisles were reached through a narthex, and the former terminated in a semi-circular apse, while the latter were closed by two sacristies at the upper end.

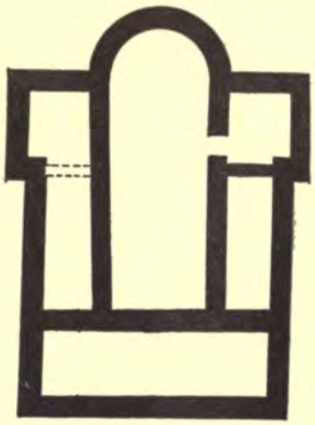


Fig. 514.—Silchester. Plan of Christian Basilica (IVth or Vth Century).

The basilica at Silchester, the plan (Fig. 514) of which unquestionably indicates the Christian purpose for which it was erected, has been dated between 313 and 411,[1] and I think rightly, particularly on the ground of the orientation, for it was only after the erection of the Basilica Ursiana at Ravenna (370–384) that the new Ravennate arrangement of the apse at the east end was generally adopted. On the other hand, Britain was rapidly Christianized in the course of the IVth century.[2]

The church of Silchester affords a very early specimen of an apse flanked by two "secretaria." In Italy it is illustrated by three examples, also of early date, two of which have been already mentioned: the Basilica Pammachiana at Porto near Rome (about 398), and the large Basilica of St. Symphorosa on the Via Tiburtina, thought to be not later than about the Vth century. The third is San Salvatore at Spoleto, which belongs to the IVth century.

* * *

We are able to say even less about church building in the years following the calling in of the barbarians down to the arrival of the monk Augustine and his

[1] *Archaeologia*, Vol. LIII.—Fox and St. John Hope, *Excavations on the Site of the Roman City at Silchester, Hants, in* 1892.

[2] Harnack, *The Mission and Expansion of Christianity in the First Three Centuries.*

companions (597). The feeble ray of light (one might almost say moonlight) shed by the remains of the little suburban church of St. Martin at Canterbury is insufficient to dissipate the settled darkness which envelops the conditions of the art of building during the period when the unhappy country was being trampled under foot by its new masters. Those remains are in all probability to be referred to the work of Queen Bertha,[1] and this explains the dedication of the church to the wonder-working saint of Tours.

When Bertha, daughter of Caribert I (561–567), was married to Ethelbert King of Kent (560–616),[2] a condition was made, according to Bede,[3] that she should be accompanied by Liudhard so that she might keep her Christian Faith. Hence, it is natural that as Ethelbert had a sanctuary for his pagan worship, his wife should

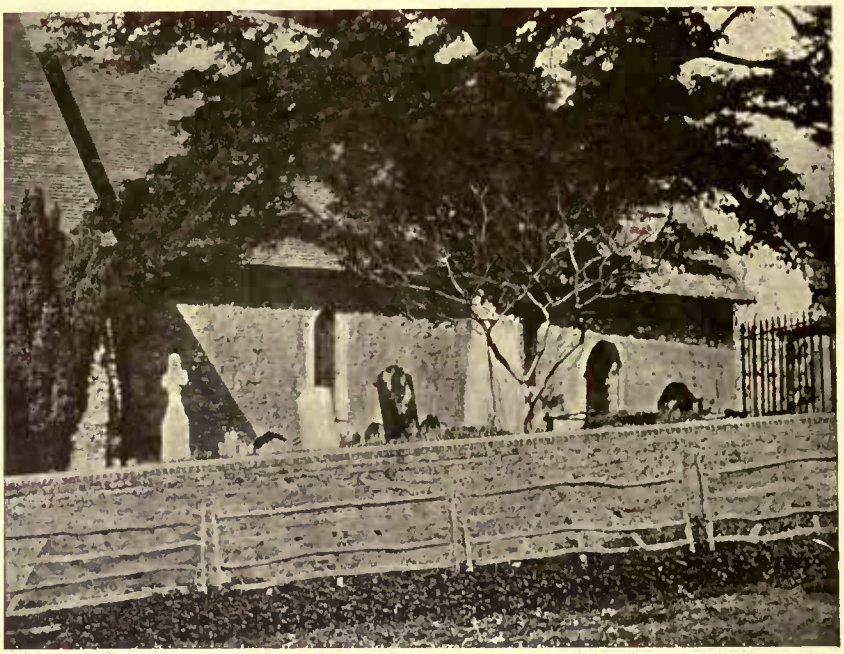


Fig. 515.—Canterbury. Old Church of St. Martin. South side (VIth Century).

demand another for her Christian service; and so St. Martin's was erected on the spot where she was wont to offer her prayers. This supposition would be confirmed by the eastern orientation of the structure, a fact which is fatal to Bede's assertion that it was built in the days of the Roman occupation. Whatever its form may have been, the chancel was certainly at the east end. It has been thought[4] that it was semicircular, on account of traces of buttresses belonging to the original building discovered at the south-east angle; but the evidence is insufficient, though it is quite true that everything is in favour of an apsidal end. Moreover, the use of Roman bricks in the construction suggests a date contemporary or nearly so with St. Pancras at Canterbury, built by Augustine.[5] Unless the traces of a junction with the south wall of the church, near the second door, and the remains of a pavement

[1] *The Archaeological Journal*, December, 1906.—Micklethwaithe, *Something about Saxon church building.*

[2] *Rolls Series—The Anglo-Saxon Chronicle.* [3] *Historia ecclesiastica gentis Anglorum.*

[4] Routledge, *The Church of St. Martin, Canterbury*—Appendix C.

[5] *Archaeologia Cantiana*, Vol.XXV.—St. John Hope, *Excavations at St. Austin's Abbey, Canterbury—The Chapel of St. Pancras.*

in front of the latter, belong to a porch,[1] in which case the church itself would date from the time of Augustine, and belong to the type which has been conveniently named "Augustinian."

Of the primitive church there remains the rectangular nave (Fig. 515), which has been tampered with and originally extended further west. It forms the chancel of the present Anglo-Saxon church, probably built after a bishop was established there by the primate Theodore (668–690), as we are told in "The Black Book of the Archdeacons of Canterbury." This episcopal see is also mentioned by Dugdale.[2]

St. Martin's contains a font which may be supposed to have been originally a well-head, and belongs to the XIIth century. The decorative motives on it are derived from the simple arcading found as an ornament on other well-heads, *e.g.* the one in the cloister of St. John Lateran at Rome (Fig. 516), the execution of which indicates the same date as that of the *puteal* in the ancient atrium of San Giovanni a Porta Latina, in other words, the Xth century.

Fig. 516.—Rome. Well-head in cloister of St. John Lateran (Xth Century).

* * *

We are more fortunate when we come to the years after 597, and the constructive period of the time of Augustine and his companions, for here we have important descriptions and remains of building.

THE CATHEDRAL OF CANTERBURY.—We know from Bede[3] that the monk Augustine, afterwards first Archbishop of Canterbury (603–605), recovered, with the help of Ethelbert, a church said to have been built on the site by Roman Christians, and dedicated it to the Saviour. Augustine's work, however, cannot have been confined to a consecration, but must have taken the form of rebuilding, for the altar was at the east end, an arrangement which shows that the church cannot have been erected before the Anglo-Saxon conquest. And we cannot suppose that in the years between that conquest and 597 the Christians would have erected, under Pagan rule, a church of such importance, which was a reproduction, up to a certain point, of St. Peter's at Rome. As a matter of fact, Mabillon[4] mentions the rebuilding of the previous church, and places it in 602. Goscelin[5] also confirms the fact of a construction by Augustine; and a short description of it is given by Eadmer.[6] According to this it consisted of a nave and choir with aisles. The apsidal chancel

[1] *The Archaeological Journal*, Vol. LVIII.—Peers, *On Saxon churches of the St. Pancras type.*

[2] *Monasticon Anglicanum.* [3] *Hist. eccl.* [4] *Annales Ord. S. Benedicti.*

[5] Mabillon, *Acta Sanct. Ord. S. Benedicti—Vita s. Augustini episcopi Cantuariensis primi Anglorumque apostoli.*

[6] *Rolls Series—Gervasii Cantuariensis opera historica.*

at the east, raised above a crypt or *confessio* formed in imitation of that in St. Peter's at Rome, and reached through the choir, was faced at the west end by a chapel dedicated to the Virgin, also elevated above the floor of the church, and containing the primatial chair. From the aisles, at a point more than halfway down the church towards the west, projected two towers, which at first must have been mere porches, afterwards raised in height by Archbishop Odo (942–959), when he increased the walls of the church to a height of 50 ft. There is no record of tower porches in England before the Xth century. The southern tower contained an altar dedicated to Pope Gregory, while the northern had an altar of St. Martin.

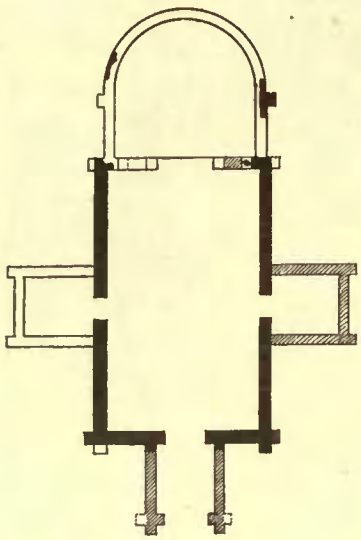


Fig. 517.—Canterbury. Plan of St. Pancras (VIth or VIIth Century).

On these main facts, and some secondary ones derived from Gervase, Professor Willis[1] based a plan of Augustine's church, imagination supplying the gaps where Eadmer's description fails. But we shall deal with this when we come to discuss St. Mary's at Abingdon (675).

THE CHURCH OF ST. PANCRAS AT CANTERBURY.—Thorne[2] and Elmham[3] say that this was a pagan temple which Augustine converted into a church and dedicated to St. Pancras. This transformation ("quod phanum . . . mutavit in ecclesiam") certainly took the form of rebuilding, for the existing remains show no trace of a temple, but belong to a church with an elongated apse at the east end.

The little church had an aisleless nave terminating in a semicircular apse with a bay in front of it, separated from the nave by four columns (Fig. 517). It possessed three porches, on the west, north, and south sides. What remains visible above ground consists of the body of the church, and very scanty relics of the presbytery and apse (Fig. 518).

Fig. 518.—Canterbury. Remains of St. Pancras (VIth or VIIth Century).

The plan of St. Pancras, with its apsidal chancel projecting by more than a semicircle from the outer nave wall to provide room for a presbytery; with its chancel,

[1] *The architectural history of Canterbury Cathedral.*

[2] Twysden, *Historiae anglicanae scriptores decem—Chronica Guill. Thorne monachi S. Augustini Cant.*

[3] *Rolls Series—Historia monasterii S. Augustini Cantuariensis.*

divided from the nave by a row of columns; with its small porch at the west front, and the side chapels or porches, exercised a notable influence on the form of later English churches, right up to the Norman Conquest. The origin of the plan is involved in great obscurity, and we shall endeavour to give an explanation which may throw some light on it. The idea of a row of columns dividing the nave from the sanctuary was borrowed from a church with which the monk Augustine must have been well acquainted, as it stood but a few steps from his monastery of San Gregorio *ad Clivum Scauri* at Rome. This church, the relationship of which to the other has not hitherto been suggested, is the building which some archaeologists identify with

THE PALATINE CHURCH OF SAN CESARIO.—The "Ecclesia S. Caesarii in Palatio" is first mentioned in the reign of Phocas (603), and for the last time in the XIVth century. Though its site has not been identified, Lanciani[1] is inclined to place it in the ruins of the so-called Baths of Heliogabalus on the Via Sacra (IIIrd century). Others think that it was an oratory of the IVth century fitted up in the "Domus Augustana," and afterwards converted into a church.[2] Without attempting to decide between such conflicting views, we will confine ourselves to the simple statement that a church was undoubtedly fitted up in these ruined buildings about the end of the Vth century. The rough construction of the inserted masonry, consisting of alternate courses of used-up bricks and blocks of tufa, with a liberal use of mortar, points definitely to the period following the days of Leo I (440–461) and the terrible sack of the city by Genseric's Vandals (455), and preceding the revival of building under Theodoric (493–526). The remains of Santo Stefano on the Via Latina, erected in the time of that great pontiff, are very instructive in this connection, for they show the same style of masonry as the inserted walls of the reputed San Cesario, though it is not so rough.

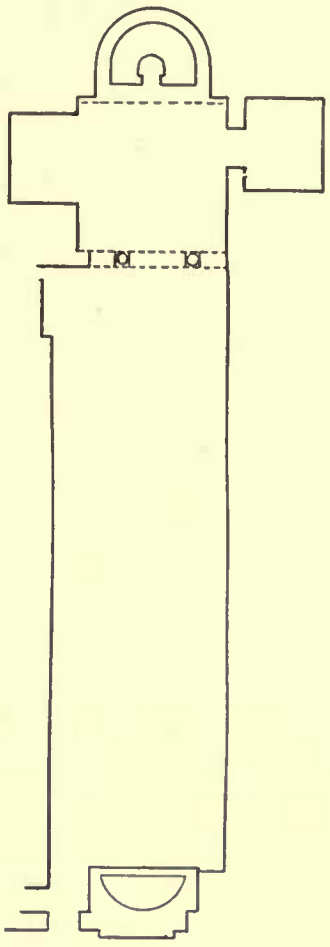


Fig. 519.—Rome. Plan of so-called San Cesario al Palatino (Vth Century).

The fragmentary remains of the church in question, of which I append an approximate plan (Fig. 519) as it appeared when excavated in 1872, consist of a nave ending in a spacious presbytery marked off by two columns and two pilasters (Fig. 520). The presbytery is flanked by two sacristies, as in the large basilica of St. Symphorosa on the Via Tiburtina, and is provided with an apse having a passage round it behind the altar. An exactly similar arrangement is presented by an ancient dated example, the basilica at Benian in Algeria (434–439).[3] Facing the apse at the further end of the church is the tank for baptism.

It will be readily seen that this church is related to those of the Anglo-Saxon period, not only by its pillared chancel screen, but also by the cruciform shape given

[1] *The ruins and excavations of ancient Rome.*

[2] *Nuovo Bull. di Archeologia Cristiana*, 1907—Bartoli, *Scoperta dell' oratorio e del monastero di San Cesario sul Palatino.*

[3] Gsell, *Les monuments antiques de l'Algérie.*

Fig. 520.—Rome. Remains of so-called San Cesario al Palatino (VIth Century).

to the presbytery and found, for instance, in the churches of Repton (Xth or XIth century), Deerhurst (Xth century), and St. Mary's in the Castle at Dover (XIth century). Another point of contact is the prolongation of the apse, a feature already presented by St. Symphorosa.

The large rectangular chambers at the sides of the presbytery of the reputed San Cesario, transferred to the aisleless nave of St. Pancras form the typical chapels which some English writers [1] [2] believe to be the germ of the transept of later times, ignoring the fact that the Romans had constructed not only buildings in the form of a Latin cross, but also cruciform structures with a dome over the crossing, as may be seen in Montano [3] and other sources. And they were followed in this by the builders of Ravenna, as may still be seen in the mausoleum of Galla Placidia (about 440), and as might have been seen a few centuries ago in the church of Santa Croce (about 449). Consequently there was no occasion to evolve the idea afresh by means of tentative experiments.

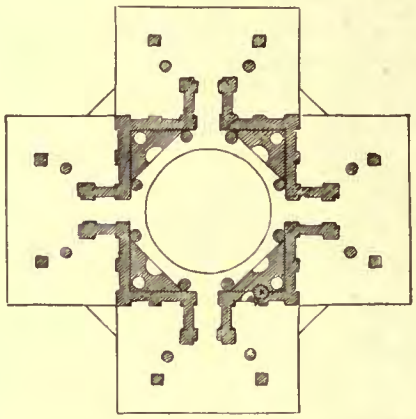


Fig. 521.—Rome. Plan of tomb on the Via Appia. (*From Montano*, "*Li Cinque libri di architettura.*")

With regard to the external buttresses of St. Pancras, we know how this form of support had been already developed in Italy. The single-bay porch at the west end was derived from the one in front of the portico of the Constantinian St. Peter's. Lastly, as to the two side porches, we may remark that the scheme of giving more than one portico to a building had been already introduced by the Romans. Montano [4] and Bramantino [5] give illustrations of buildings with several entrances each approached through a porch (Fig. 521). We may also remember that

[1] F. Bond, *Gothic Architecture in England.*
[2] Prior, *A History of Gothic Art in England.*
[3] [4] *Op. cit.*
[5] *Op. cit.*

before this time an example of two lateral porches is presented by the celebrated

CHAPEL KNOWN AS THE TEMPLE OF THE CLITUMNUS, NEAR SPOLETO.—It consists of a cella measuring inside about 15 ft. × 10 ft., with a semicircular recess at the east end, and a vestibule or narthex flanked by two porches which have been damaged. Cella, narthex, and porches, all have barrel vaults, while the apsidal recess is covered by a half-dome. The walls are constructed of squared blocks of limestone, and have been tampered with at the sides. At the top runs a dentil cornice. The cella was originally lighted by an opening above the entrance: the windows on the south side have been made later (Figs. 522, 523).

Fig. 522.—Temple of the Clitumnus near Spoleto (IVth Century).

Inside, above the small apse (partly buried under the modern road to Foligno) is a tympanum with the decussate cross-monogram among scroll work with roses. An elaborate cornice runs round the base of the half-dome at the impost line. The pediment above the exterior of the apse contains the cross-monogram between scrolls with roses, bunches of grapes, poppy heads, and vine leaves.

The elaborate pediment of the façade is supported by four marble columns, two of spiral design and two covered with imbricated water-leaves, and two pilasters. They are surmounted by Corinthian capitals with acanthus leaves, or with stiff leaves combined with acanthus, or, in a third case, with palmetto leaves, acanthus, and scroll work with roses. The pediment contains the cross-monogram, between scroll work bearing roses, vine leaves, clusters of grapes, and poppy heads.

De Rossi[1] regarded this architectural gem as a pagan sanctuary transformed into a Christian church in the Theodosian age (379–450). Grisar,[2] on the other hand, believes it to be a building of the pre-Christian period, constructed in its lower part of old materials, and afterwards rebuilt by Umbrian "marmorarii" in the XIIth century.

My view, on the contrary, is that it is a structure of one date, and that of Christian times, and contemporary with the basilica of San Salvatore or the

[1] *Bull. d'arch. cristiana*, 1871—*Spicilegio d'archeologia cristiana nell' Umbria—Del tempietto sulle rive del Clitunno, consecrato al culto cristiano.*

[2] *Nuovo bull. d'arch. cristiana*, 1895—*Il tempio del Clitunno e la chiesa spoletina di San Salvatore.*

Crocifisso at Spoleto, *i.e.* perhaps the reign of Constantine. Thus, though its original masonry is composed of materials taken from earlier buildings, it is obviously the result of a single constructive effort. The architectural ornaments, too, were executed at one and the same time. A comparison of the carving on the façade with that in the interior above the apse is quite enough to prove this. And the capitals of the vestibule, in spite of their differences in design, were executed at the same moment.

Fig. 523.—Temple of the Clitumnus near Spoleto. Side view (IVth Century).

These carvings, in their turn, are obviously contemporary with those in San Salvatore. Compare the continuous impost cornice of the altar recess in our chapel with that in the apse and those in the central square space of San Salvatore, and the correctness of my statement will at once become apparent. Moreover, the surviving Corinthian capital belonging to one of the pilasters on the front of San Salvatore is clearly of the same date as the two imbricated columns in the chapel by the Clitumnus. And the carving on the front of the chapel is, on comparison, seen to be contemporary with that on the front of San Salvatore. At the most one might say that the latter has a slightly more classical air about it.

Before leaving the subject we should notice that here, as in the case of San Salvatore at Spoleto, topographical reasons were responsible for the eastern orientation, as the chapel was built against the steep cliff, with its front turned to the ancient Roman road which must have run below it.

THE CATHEDRAL OF ROCHESTER.—The church of St. Andrew at Rochester was built (604) by King Ethelbert for Justus its first bishop (604–624), subsequently archbishop of Canterbury (624–627).[1] Of this earliest cathedral, as is supposed—for there is no record of any rebuilding—the foundations of part of the east end were discovered in 1889 below the west front of the present cathedral and the roadway before it. The remains showed an aisleless nave ending in an apse at the east; but there was no indication whether or no they were separated by a row of columns.

THE CATHEDRAL OF YORK.—We learn from Bede[2] that King Edwin (617–633) began to build (627), under the direction of Paulinus, the first bishop of York (627–633), a basilica dedicated to St. Peter, which his death at the battle of Hatfield prevented him from finishing. This was done by King Oswald (634–642).

[1] [2] Beda, *Hist. eccl.*

In the course of the works undertaken after the fire of 1829 a large part of the area occupied by the church of Paulinus came to light. It was found to be a cruciform building with a very short transept. As no traces of the sanctuary were discovered it is not known whether the cross was, as is very probable, imperfect, *i.e.* without the topmost limb, or of the perfect "Latin" form. Two fragments of the nave walls of this church can still be seen in the crypt of the present cathedral.

The cathedral of York is supposed to have served as a model for the primitive St. Peter's at Peterborough, founded by Peada, king of Mercia (655–656 or 657), and erected by the first abbot Saxulf. Burned by the Danes in 870 it was rebuilt with the help of King Edgar (957–975) by Ethelwold, bishop of Winchester (963–984);[1] [2] [3] and it is not possible, in their present state, to date with certainty the remains of transept and presbytery walls of some early church existing underneath the present cathedral.

THE CHURCH OF ST. MARY AND ST. ETHELBURGA AT LYMINGE (KENT) was built by Queen Ethelburga after the death of her husband, Edwin of Northumbria (633), or, to be precise, in the year 640.[4] There exist near the present church, which is ascribed to Dunstan, some remains of its foundations showing that the nave and chancel were separated by two columns.

Following the type of the buildings which we have described was erected

THE CHURCH OF ST. PETER ON THE WALL AT YTHANCAESTIR (BRADWELL) IN ESSEX, of which the walls of the aisleless nave still exist. It is supposed that these remains belong to the church erected by Cedd of Lindisfarne, bishop of the East Saxons (653–664).[5] This view we cannot accept. We learn from Bede that the church of the monastery at Lastingham, founded by Cedd himself (648), was constructed of wood, and that it was only later that a stone church was built in honour of the Virgin, into which the body of the founder was transferred. We can hardly imagine that, when he had used timber for the church of Lastingham, which was so near to his heart, he would go on to erect another in masonry after the Augustinian type of St. Pancras at Canterbury. We must not forget the tenacity with which the Irish missionaries clung to wooden construction, even when they went to Italy and were in contact both with ancient buildings and with the rising Lombardic School. It is far more likely that the first church at Ythancaestir was of wood, and that later it was rebuilt in stone under the influence of Canterbury, after the Synod of Whitby (664).

Some writers (Amico Ricci[6] and Merzario[7] among them) state that the churches built at the time of Augustine's mission were the work of Italian craftsmen, particularly those belonging to the Comacine gilds, who followed him together with the missionaries sent by Gregory the Great. This, however, is an arbitrary assertion. The Pope sent with Augustine monks only ("misit servum Dei Augustinum et alios plures cum eo monachos timentes Dominum"), not monks and craftsmen. The "operarii," whose small numbers compared with the abundant harvest of converts had been deplored by Augustine in the message sent through Peter and Laurence,

[1] *Rolls Series—The Anglo-Saxon Chronicle.*
[2] Beda, *Hist. eccl.*
[3] Sparke, *Historiae anglicanae scriptores varii—Chronicon Angliae per Iohannem abbatem Burgi S. Petri—Hugonis Candidi coenobii Burgensis historia.*
[4] *Rolls Series*—Elmham, *op. cit.*
[5] Beda, *Hist. eccl.*
[6] *Op. cit.*
[7] *Op. cit.*

were not material workmen but missionaries, and it was of such that Gregory sent him a fresh supply (601) (". . . . misit cum praefatis legatariis suis plures cooperatores ac verbi ministros") to the fullest extent that was in his power ("exhaurit monasteria sua et ecclesias, et quidquid potest eruditorum ac religiosorum virorum in opus Evangelii efflagitare . . . certat delegare").[1] [2] The fact is these buildings must have been designed and carried out by the monks. Saxulf, the first abbot of St. Peter's at Medeshamstede (Peterborough), is actually described in Bede[3] as the "constructor" of the monastery founded by Peada. And though it is reasonable to suppose that, in consequence of the wars and disorder prevailing after the Anglo-Saxon invasion, England became practically devoid of any national art, and the tradition of beautiful things was lost as the artists of the old time went down to the grave without imparting any lessons to their successors, yet we cannot imagine that a school of builders, however rude, did not continue to exist; still less that the very stamp of it had perished. We may therefore fairly assume that the builders of the structures in question were English. In any case the entire absence of architectural ornaments and carving excludes the presence of Italian or French artists in these works, and so confirms the opinion expressed above.

* * *

When Oswald became King of Northumbria (634–642), there was a pause in the extension of the influence of the Church of Rome, while the activity of the Irish Church was correspondingly accentuated. The latter dated from the Vth century, its first two bishops being Palladius (431–432) and Patrick (432–461).[4] Oswald as a boy had found refuge within the walls of the monastery founded by Columba († 597) in the island of Iona, where he had taken up his abode about the year 563, and whence he drew Aidan and other clergy belonging to the Celtic rite in which he had been baptized. The foundation of the monastery at Lindisfarne followed. Here Aidan fixed his episcopal seat (634–652), and from it soon issued bands of missionaries who spread over the realm of Oswald (where with his help they erected churches) and the various other states, but not over Kent which belonged to the Roman obedience.

Oswald's death at the battle of Maserfield and the consequent supremacy of the pagan king, Penda (626–654 or 655), retarded for a space the activity of the missionaries, but it became more lively than ever the moment that Penda was dead and Oswy had ascended the throne (642–670). So that the North of England, so far as it was Christianized, had for its primate, not the archbishop of Canterbury, in spite of the rights which he asserted, but the abbot of Iona. At length the Synod of Whitby (664) inflicted a mortal blow on the flourishing Celtic community; and the Latin Church obtained a firm seat in the island with no rival to dispute her sway.

Of the churches erected by the missionaries of Iona and Lindisfarne or its daughter monasteries I have not been able to find traces of any one constructed of masonry. Perhaps this is because they were all built "in the Celtic fashion" or "in the Scotch fashion," that is to say of wood, like the cathedral erected by Finan (652–662) at Lindisfarne ("quam tamen more Scotorum non de lapide sed de robore secto

[1] Beda, *Hist. eccl.*

[2] D'Achery, *B. Lanfranci Cant. archiep. opera* (Migne, *Patr. Lat.*, vol. 150)—*Appendix—Vita S. Augustini ex vetere MS. Beccensis abbatiae.*

[3] *Hist. eccl.*

[4] Bury, *The Life of St. Patrick and his place in History.*

totam composuit atque arundine texit"), the reed and thatch roof of which Bishop Eadbert (687–697) replaced by a complete covering of sheets of lead ("ablata arundine plumbi laminis eam totam, hoc est et tectum es ipsos quoque parietes eius cooperire curavit").[1]

We need not be surprised at the Irish clergy erecting structures of this kind in England, when we remember that the church built by Columban († 615) in Italy at Bobbio, in the reign of the Lombard king, Agilulf (590–615), was also of wood: "ecclesiam in honore almae Dei genitricis semperque Virginis Mariae ex lignis construxit."[2] It has been suggested[3] that the church of Lindisfarne was rebuilt in stone by King Ecgfrid (670–685), and that its tri-apsidal arrangement was due to Theodore, archbishop of Canterbury (668–690). But the account in Bede, who lived about the same time (677–735) and was familiar with the place and circumstances, is fatal to the theory. The remains of a stone church, which had, as a matter of fact, three apses, discovered to the east of the XIth–XIIth century priory church, must be assigned to a date after its second destruction by the Danes (867), and probably to the reign of Athelstan (924 or 925–940), who was such a benefactor to Lindisfarne,[4] or even later.

* * *

The struggle for supremacy between the Latin and the Celtic Churches in Northumbria was conducted on the side of Rome by two energetic champions, Benedict Biscop and Wilfrid, the latter being the most prominent. And it was carried on with a policy clear-sighted, determined, at times even high-handed, at least in the case of Wilfrid, who was always more inclined to carry peace than war in the folds of his tunic; but also with the aid of one of the arts which is more closely connected than others with the instincts, the ideas, the progress, the needs of a people —I mean architecture. And so they set themselves to erect churches in the country, the work of builders of more skill than could be found at home, and recruited beyond the Channel: churches with glass windows, a new thing in Great Britain, and sometimes paintings brought from Rome and intended to form a "biblia pauperum" to teach the unlearned the facts of the sacred story. One of these churches was constructed in so elaborate a fashion as to make it the most notable of which the district could boast for a long time to come. Let us see what remains of them.

THE CHURCH OF ST. PETER, MONKWEARMOUTH, was built in 675 by Benedict Biscop, first abbot of Wearmouth and Jarrow, near the monastery which he had founded (674) at the mouth of the Wear with the aid of King Ecgfrid (670–685). Bede[5] informs us that the church was built of stone in the Roman style, which was always preferred by Benedict, certainly as against the Celtic fashion of wooden construction. And it was carried out by workmen brought on purpose from France.

Of the original building, which took but a year to finish, there remains only the

[1] Beda, *Hist. eccl.*
[2] Mabillon, *Acta Sanct. Ord. S. Benedicti—Miracula Columbani scripta a monacho Bobbiensi.*
[3] *Archaeologia Oxoniensis*, 1893—Park Harrison, *On an early illuminated manuscript at Cambridge.*
[4] *Rolls Series—Symeonis monachi historia ecclesiae Dunelmensis.*
[5] *Vita sanctorum abbatum monasterii in Wiramutha et Girvium.*

Fig. 524.—Monkwearmouth. West end of church (VIIth Century).

west front and its two-storied porch (Figs. 524, 525), the outline of whose gable can still be seen in the third stage of the present tower. The western opening of this porch is sustained by short baluster shafts (Fig. 526), turned on the lathe, standing on high plinths ornamented with intertwined serpents, whose long, beak-like jaws interlace, like some of the winged creatures on the famous Bayeux Tapestry (XIth century). In the tower which rises above, the upper part is no doubt due to the restoration carried out in 1075 [1] [2] by the monk Aldwin, with the assistance of Walcher, bishop of Durham (1071–1080), after the destruction caused by the Scotch king, Malcolm III (1054–1093), and certainly before 1083, when the monks of Jarrow and Monkwearmouth were transferred to Durham. It has, indeed, been suggested that the addition to the tower belongs to the years between the foundation of the church and the devastations of the Danish hordes (867), who burned the monasteries of Monkwearmouth, Jarrow, Tynemouth, Lindisfarne, and Whitby. But, as we shall see when we come to the abbey church of Ramsey, the characteristic western tower makes its first appearance in connection with datable English churches only in the Xth century, and then as an importation from France.

The tower at Monkwearmouth is closely related to that of St. Cuthbert's, Billingham (Fig. 527), which must not be identified with the church of Ecgred, bishop of Lindisfarne (831–846),[3] but was erected after the Conqueror had given back Billingham to St. Cuthbert (1072).[4] It is also related to those of St. Mary, Ovingham, and St. Mary Bishophill Junior at York, which belongs to the time of the Conqueror's rebuilding of St. Mary's Abbey, York (1088).[5] All the towers with two-light openings enclosed by a common arch standing out from the face of the wall, or framed by a single arch within a rectangular recess, are later than the Conquest, which ushered in their appearance in England. Monkwearmouth, Jarrow, and Billingham provide instances.

In St. Peter's, Monkwearmouth, we find for the first time in Great Britain the so-called "long and short work," in which the stones at the salient angles and the jambs of

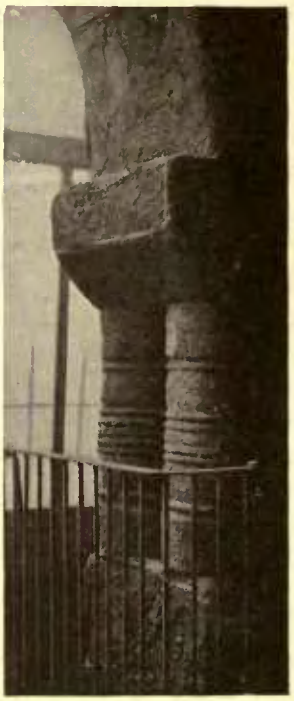


Fig. 526. — Monkwearmouth church. Baluster shafts in outer west door (VIIth Century).

[1] *Rolls Series—Symeonis monachi hist. Eccl. Dunelm.*
[2] [3] *Rolls Series—Symeonis monachi historia Regum.*
[4] *Rolls Series—Symeonis monachi hist. Eccl. Dunelm.*
[5] Dugdale, *op. cit.*

Fig. 525.—Monkwearmouth church. Interior of west end (VIIth Century).

the openings are set alternately horizontally and vertically. A Byzantine origin has been sought for this form, and a pedestal (Fig. 528) in the Acropolis at Athens has been produced as evidence; but this structure belongs to a monument erected in honour of M. Vipsanius Agrippa in 27 B.C., and has nothing in common with the work in question. Bonding of this kind, used in the angles of irregular masonry, and forming a source of weakness rather than of strength, was undoubtedly a product of barbarism in the art of quoining. Its introduction into Britain, to judge by what we know, must have been due to French craftsmen, perhaps from Poitou, as there is no other locality where we find its use so deeply rooted and with the tradition of a thousand years behind it; for instance, at Poitiers, where the interior of the narthex of the baptistery of Saint Jean exhibited it as early as the first years of the XIth century, and masonry, both ancient and modern, in secular buildings still provides numerous illustrations of it for the observer to-day. In this connection it is interesting to note that, just at the time of Benedict Biscop, there is evidence of direct contact between the North of England and Poitou in a fragment of the will of Ansoald,

Fig. 527.—Billingham. Tower of St. Cuthbert's (XIth Century).

Fig. 528.—Athens. Acropolis. Base of monument to Agrippa (Ist Century B.C.).

bishop of Poitiers (682–696), from which we learn that he appointed a bishop called Romanus from the land of the Scoti, accompanied by a band of his countrymen, to govern and occupy the monastery of Mazerolles sur Vienne which had been restored by him.[1]

Fig. 529.—Edinburgh. Museum. Top of Roman altar from Birrens.

Before leaving Monkwearmouth I should like to say a word about the baluster shafts. I have never been able to discover any of earlier or even contemporary date with these. They seem to me to reveal the co-operation of native workmen in the construction of the church. The use of supports of this form for decorative purposes was of great antiquity in the island. An altar of the Roman period discovered at Birrens (Dumfriesshire), and now in the Museum at Edinburgh (published in the "Transactions and Journal of Proceedings of the Dumfriesshire and Galloway Natural History and Antiquarian Society, 1895–96") has a carved representation of an arched doorway with the jambs formed as baluster shafts (Fig. 529). Another small Roman altar from Lanchester in the Cathedral Library at Durham has also been mentioned in this connection, but the pediment of the shrine represented on it does not rest on baluster shafts, but on a bead and reel and cable moulding.

ST. PAUL'S CHURCH, JARROW, founded by Benedict Biscop and Abbot Ceolfrid, with the assistance of King Ecgfrid (670–685), was consecrated in 684.[2] The nave of the original building still exists forming the present chancel (Figs. 530, 531). It was restored in the course of Bishop Walcher's[3] work carried out after 1074, at the same time as the erection of the existing porch with its tower. In the north porch of the present church in the Pointed style are preserved some ancient baluster shafts and fragments of a string-course with miniature balusters and vertical rolls of sausage shape in relief, of the same date as similar fragments belonging to Wilfrid's church at Hexham, now in the Cathedral Library at Durham. There are also various pieces of carving, some of which

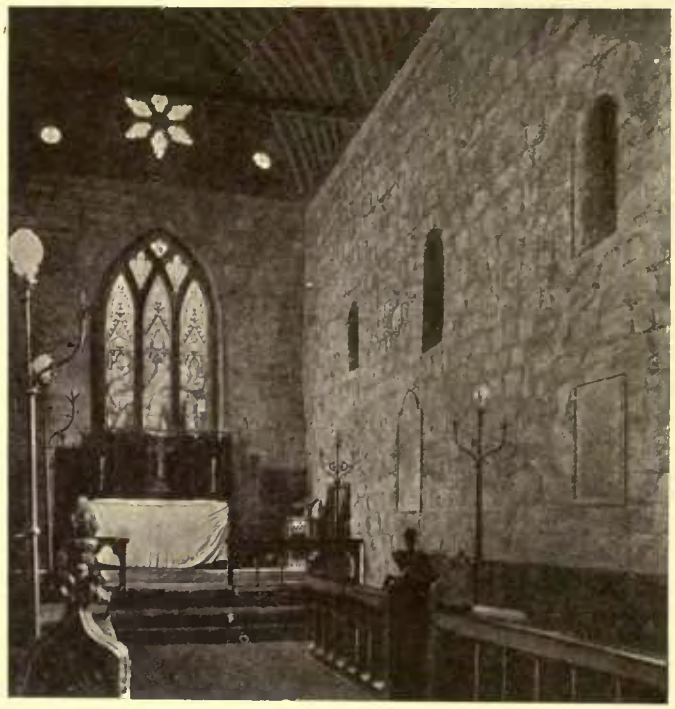


Fig. 530.—Jarrow. Nave of the original church (VIIth Century).

[1] Chamard, *Histoire ecclésiastique de Poitou—Mémoires de la Société des Antiquaires de l'Ouest*, 1889.
[2] Beda, *Vita abbatum.*
[3] *Rolls Series—Symeonis monachi hist. Eccl. Dunelm.*

may be ascribed to the French artists brought over by Benedict Biscop. They consist of a fragment with interlacing and birds, and another exhibiting interlacing with part of a recumbent figure, and also a man disentangling himself from the interlacing. They go with another fragment at Hexham, and part of a cross from Jarrow at Durham.

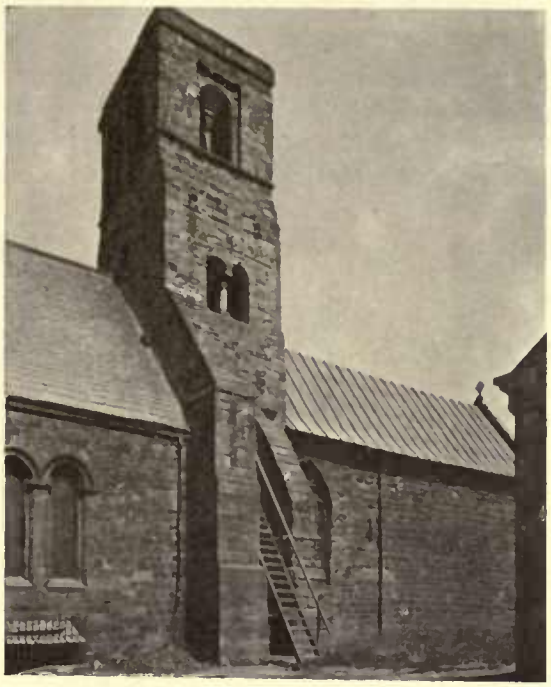


Fig. 531.—Jarrow Church. South side of the original nave and later tower (VIIth and XIIth Centuries).

THE BASILICA OF ST. ANDREW AT HEXHAM was erected by Wilfrid (634–709) between 672 and 678. Its dedication is the same as that of the church built by Gregory the Great in his monastery near the Clivus Scauri, from which came the missionaries who evangelized the Anglo-Saxons. Eddius Stephanus,[1] the biographer and chaplain of the energetic bishop, has left a short account extolling the size ("mirabilique longitudine et altitudine") and splendour of the building ("neque ullam domum aliam citra Alpes montes talem aedificatam audivimus"); but these eulogies must be discounted, as it is easy to see that language of this kind originated in the great poverty of ecclesiastical structures which might serve as standards for contemporary descriptions. These characteristics are confirmed by Richard of Hexham[2] (who has left a fairly detailed account, though with some omissions, of Wilfrid's church), Simeon of Durham,[3] William of Malmesbury,[4] and Eadmer.[5]

Of the original church, which still retained its beauty in the time of William of Malmesbury (XIIth century), as he himself says in his "Gesta pontificum Anglorum," but was wrecked by the Scotch in 1296, there is preserved the crypt, above which rose the sanctuary, as we learn from the metrical biographer of Wilfrid, Frithegode.[6] It consists of a chamber reached through a vestibule, with three passages for entrance and exit. There are also some remains of the apse.

With regard to the actual builders of St. Andrew's we are informed in general terms that Wilfrid procured them from the Continent ("adductis secum ex partibus transmarinis artificibus"—"De Roma quoque et Italia et Francia et de aliis terris ubicumque invenire poterat, cementarios et quoslibet alios industrios artifices secum retinuerat"). But we are also told explicitly that they were brought from Rome ("sed et cementariorum, quos ex Roma spes munificentiae attraxerat, magisterio . . ."), which finds its natural explanation in the fact that the Roman workmen, accustomed as they were from the time of Constantine onwards to erect

[1] *Rolls Series—The historians of the Church of York and its archbishops—Vita Wilfridi episcopi.*
[2] Twysden, *op. cit.—De statu et episcopis Hagustaldensis Ecclesiae.*
[3] *Rolls Series—Hist. Regum.*
[4] *Rolls Series—Gesta pontificum Anglorum.*
[5] *Rolls Series—The historians of the Church of York and its archbishops—Vita Wilfridi episcopi.*
[6] *Rolls Series—The historians of the Church of York and its archbishops—Vita S. Wilfridi episcopi.*

colonnaded basilicas with ancient materials, were the best fitted for carrying out the bishop's ideas.[1] [2] [3]

For the works which they were engaged in executing under his direction he had formed a clear idea during his sojourns in Rome, where, as early as his first visit (about 654), he was able to admire, among other things, the galleried basilicas of Sant' Agnese fuori le mura (Fig. 532) and the Santi Quattro Coronati (Fig. 533), recently rebuilt by Pope Honorius I (625–638).

Fig. 532.—Rome. Basilica of Sant' Agnese outside the walls (VIIth Century).

The "title" of the Santi Quattro is mentioned as far back as the time of Gregory the Great, and dates, according to some authorities, from the Vth century. Duchesne[4] believes that the church goes back to the IVth century, which would explain its western orientation, unless indeed this is the result of reasons connected with the site. It was rebuilt by Honorius I, Leo IV, and lastly, after the Norman fire, by Paschal II, who began his work on it in 1109, and consecrated it in 1112. It was remodelled and redecorated in the XVth, XVIth, and XVIIth centuries.[5] [6] [7]

In my opinion the traditional history of the Santi Quattro does not quite correspond with the facts; and the reconstructions under Leo IV and Paschal II consisted, in the former case, of restorations and new additions, in the latter, of mutilations and additions, preserving in part the arrangements of the church of Honorius I. This view is confirmed by the apse, in which the untouched masonry of the exterior belongs to the work of Honorius up to a point above the large original windows with their double ring of bricks. If we compare it with the brickwork of the time of Leo IV (*i.e.* the IXth century) to be seen in the apses of Santa Cecilia in Trastevere (817–824), and San Giorgio in Velabro (827–844), and in the nave of Santa Prassede (817–824), all apparently the work of the same masons, we shall notice a less marked decadence, and in any case a difference in date. In the next place, no one would

[1] Mabillon, *Acta Sanct. Ord. S. Benedicti—Vita S. Wilfridi episcopi auctore anonimo sec. XII.*
[2] Twysden, *op. cit.—Ricardus prior Hagustaldensis de statu et episc. Hagust. Eccl.*
[3] *Rolls Series—Willelmi Malm. monachi gesta pontificum Anglorum.*
[4] *Le liber pontificalis.*
[5] De Rossi, *Bull. d'arch. cristiana*, 1879.
[6] Lanciani, *Storia aegli scavi di Roma.*
[7] Armellini, *Le chiese di Roma dal secolo IV al XIX.*

ascribe it to Paschal II. Very different were the exteriors of buildings of his time, especially in the treatment of the windows, as we see from the circular and round-headed specimens in the nave of Santi Giovanni e Paolo, which he restored after the Norman fire, and those in San Clemente, the rebuilding of which was started before 1126 or 1128. All that he did to the apse of the Santi Quattro was to repair it, and insert the range of consoles derived from some ancient building. At Rome, the apses of Christian buildings earlier than the epoch of about 1000 never have any but borrowed consoles, and it is a mistake to assign to the VIth century[1] the eaves cornice on the apse of San Martino ai Monti (498–523), formed of carved consoles supporting sculptured slabs and panels with masks and other ornaments, for it is made up of ancient materials.

Fig. 533.—Rome. Basilica of the Santi Quattro Coronati (VIIth and XIIth Centuries).

The apse of the Santi Quattro at a later date was raised to its present height. As for the body of the church, Paschal II abandoned the two old aisles, and walled up their colonnades ; shortened the nave, within which he constructed a new nave and two aisles ; and in the latter repeated the arrangement of galleries as it existed in the church of Honorius I. It was not till the times of Pelagius II, in the case of his transformation of the Constantinian basilica of San Lorenzo in Agro Verano (Fig. 534), Honorius I, and Hadrian I (as Santa Maria in Cosmedin showed), that galleried basilicas, with two stories of colonnades after the pagan type, were erected in Rome.

Fig. 534.—Rome. Old Basilica of San Lorenzo in Agro Verano (VIth Century).

To return to Hexham. The three churches of Pelagius II and Honorius I referred to must have formed the models for Wilfrid's structure, for

[1] Mazzanti, *op. cit.*

it was provided with just the same colonnades in two stories, a feature indicated by a passage of Prior Richard's chronicle :—" parietes autem quadratis et variis et bene politis columpnis sussultos, et tribus tabulatis distinctos immensae longitudinis et altitudinis erexit." And this explains William of Malmesbury's reference to the likeness between St. Andrew's and churches at Rome :—" Nunc qui Roma veniunt idem allegant, ut qui Haugustaldensem fabricam vident ambitionem Romanam se imaginari jurent."

Fig. 535.—Durham. Cathedral Library. Fragments of carving from St. Andrew's, Hexham (VIIth Century).

We have still to consider who executed the carving. I do not include, of course, the figured capitals mentioned by Prior Richard, because I believe they were Roman antiques brought from elsewhere. Britain, in Roman times, could not have been barren of capable executants of figure subjects. On the other hand, in the VIIth century the chisels of Rome and France, which it seems were at work on Hexham, did not produce figure capitals (I say capitals and not pulvins), for there is not a single specimen in existence.

Some of the carving from Hexham is preserved in Durham Cathedral Library. It includes three fragments of stringcourse showing upright balusters, cable mouldings, and rolls arranged either horizontally or in zigzag fashion (Fig. 535). The rudeness of both design and execution, as well as the style of ornamentation, suggest that they are the work of British hands, with whom baluster shafts were a favourite feature as far back as the Romano-British period. We cannot imagine that Wilfrid would have taken the trouble to bring artists from beyond the seas in order to produce work of this kind. These fragments go with others of the same kind preserved in St. Paul's, Jarrow, and the portion of a stringcourse with a roll between two cables now in the north arm of the transept of the existing church of Hexham.

Fig. 536.—Hexham. Capital in St. Andrew's (XIth Century).

Of the carving executed by Continental artists for Hexham we have no specimens which can be identified with certainty. We may, however, ascribe to them some of the fragments gathered in the north arm of the transept, though their provenance can only be said to be Hexham and not definitely the church. Among them are three Lombardic cubical capitals (Fig. 536), which have been made to pass for Anglo-Saxon, but are really later than the Conquest (1066). One might search in vain among dated buildings in England for capitals of similar type till we come to the abbey church of St. Augustine at Canterbury as rebuilt by Abbot Scotlandus (1070–1087). The earliest trace of simple hemispherical capitals that I have been able to find in this country is the representation of an arcade with two bulbous capitals and one of hemispherical form in the well-

Fig. 537.—Hexham. Church of St. Andrew. Fragment of carving (VIIth Century).

known MS. "Liber Geneseos, caeteraeque historiae sacrae" in the British Museum, which is thought to be rather earlier than 1066.

To the time of Wilfrid may be assigned a fragment with vine foliage showing a cock, and the legs and one arm belonging to two human figures (Fig. 537), all in low relief. The composition, design, and technique, show that it comes from the same school, and possibly from the same hand, as that which produced the two fragments with scroll work, birds, and human beings, which we noticed at Jarrow.

With the carving of the time of Wilfrid and Benedict Biscop executed by foreign artists may be connected the very decayed portions of the upright limb of a cross, supposed to be that of Acca, bishop of Hexham (710–740), or rather one of the two crosses which stood at the head and foot of his grave: "Duaeque cruces lapideae mirabili celatura decoratae positae sunt, una ad caput alia ad pedes eius."[1] The fragments, covered with a very intricate vine stem design, have been set up in the Cathedral Library at Durham, to which they were brought from Hexham (Fig. 538). The date of the carving may be that which is generally assigned to it. We know that Acca embellished St. Andrew's,[2] and we need not be surprised if the foreign artists of Wilfrid's time were followed by others at a later date who produced these gravestones. It is clear that the carving belongs to a period which, if not that of Wilfrid, is not far removed from it; and it is equally clear that it comes from a French hand. I say this because the carvers of Rome and Ravenna, at that date the best in Italy, did not produce such complicated interlacings; and those of Lombardy, though very fond of employing them, were unable to treat them with the grace shown by the cross from Hexham.

Fig. 538.—Durham. Cathedral Library. Fragment of cross from Hexham (VIIIth Century).

All this carving in relief is quite different, both in composition, design, and technique, from that of the well-known tall cross at Ruthwell, Dumfriesshire (there is a cast in Durham Cathedral Library), which cannot be dated earlier than the first half of the XIIth century (Fig. 539).

Lastly, we can connect with Wilfrid's work the ancient episcopal chair (Fig. 540) known as "the Frith stool," cut out of a single block of stone, which may be seen in St. Andrew's. The front is outlined by roll mouldings, and on the arms are carved interlacings ending in knots. The way in which the framing is executed, and the simple character of the interlacing, suggest a Roman hand; especially the mouldings, which recall works of the Roman and Ravennate schools, beginning with the well-known screen panels in San Clemente at Rome (Fig. 541).

[1] [2] *Rolls Series—Symeonis monachi hist. Regum.*

In connection with the better carving of the time of Benedict Biscop, Wilfrid, and Acca, it has been suggested that in the days of Theodore of Tarsus, archbishop of Canterbury (668–690), artists from the East came to Britain to ply their trade. But there is no mention of such in the chroniclers, and in the course of my long and frequent wanderings up and down England I have never been able to recognise their hand in any of the early carving still in existence. The presence of such artists in the island may, then, be relegated to the domain of fable. Others there are who would attribute it to Irish chisels. Ireland, they say, in the VIIth, VIIIth and IXth centuries, was not only a great school of missionaries but also of art; and as evidence they produce the illuminated manuscripts of the period. For instance, the "Book of Dimma,"[1] written by a scribe of the name, who is supposed to be the same as the Dimanus mentioned in a letter of Pope John IV (640–642).[2] Here we see simple interlacing framing figures of the Evangelists John and Matthew. Or there are the "Lindisfarne Gospels,"[3] written by Edfrid, as is supposed, before he became bishop of Lindisfarne (697–721), and illuminated by his successor Ethelwold (721–737). Here the interlacing is sometimes very complicated, and better drawn than in the "Book of Dimma." The latter is also surpassed by the "Lindisfarne Gospels" in the representation of figures, showing a more advanced stage of art. Or, again, there is the "Book of Durrow,"[4] dated in the VIIth century; but its more complicated interlacing and the representations of animals differentiate it somewhat from the "Book of Dimma," and suggest that it belongs to the second half of the VIIIth century. A noticeable peculiarity is the long beak-like jaws of the animals, a feature recalling the serpents carved by some French artist in the porch of St. Peter's at Monkwearmouth (675). Another example is the "Psalterium charactere Hibernico" in the British Museum, believed to be of the IXth century, with interlacing, simple in some cases and very intricate in others. Or, lastly, there is the "Book of Kells,"[5] the most important

Fig. 539.—Durham. Cathedral Library. Part of cast of the Ruthwell Cross (XIIth Century).

Fig. 540.—Hexham. St. Andrew's. Episcopal Chair (VIIth Century).

[1] Trinity College, Dublin.
[2] Gilbert, *National Manuscripts of Ireland.*
[3] British Museum.
[4] [5] Trinity College, Dublin.

palaeographical and artistic monument existing in Ireland, and regarded as belonging to the VIIIth century.[1] But though the style of its interlacings connects it with the "Evangelistarium of Mac Regol" († 820) in the British Museum, on the other hand the quality of the drawing suggests that it is later than the "Book of Durrow." Its date will therefore fall in the years immediately subsequent to the foundation of Kells (802–815) by Cellach, who, with the Columban community, had fled from Iona through fear of the Danes.

Fig. 541.—Rome. San Clemente. Pluteus from the choir (VIth Century).

But the interlacing in the oldest of these manuscripts, the "Book of Dimma," is evidently derived from Romano-British mosaic decoration. There was no lack in Britain of public and private buildings of that period, rich in polychrome mosaics. The existence, and also, except in the representations of living beings, the fine quality of the mosaics, is proved by, to give only one or two instances, those recently discovered at Calleva Atrebatum (Silchester) and Venta Silurum (Caerwent). We may mention, too, the mosaic in the Roman Gallery of the British Museum, which displays, besides knot work and lotus flowers, a circle enclosing eight branches arranged in the form of the so-called Maltese cross.

Mosaics of this kind might have provided suggestions for the Anglo-Saxon artists, and, if necessary, for the Irish as well. The fact remains, however, that they did not do so, for neither England, Ireland, nor Scotland contain any datable carving of the same type as that which we have classed as the work of foreign artists in the time of Benedict Biscop, Wilfrid, and Acca, going back to the years between the calling in of the Northern barbarians (449) and the coming of the craftsmen invited or brought from the Continent by Benedict and Wilfrid.

The real worth of the carvers at work in Northumbria before 675, or even after that date but continuing the old style, appears to me to be shown by the well-known gravestones in Durham Cathedral Library, the Black-Gate Museum at Newcastle-upon-Tyne, and the British Museum, which were unearthed from the ancient cemetery of the convent of St. Hilda at Hartlepool, founded by Heiu before 650[2] and destroyed by the Danes. Each of these gravestones shows a characteristic rude cross enclosed in a circle, and has a semicircular top; while the lettering of the inscriptions corresponds to that of the Irish MSS. of the VIIth century. The fact that a specimen of this rare type of gravestone has come to light in St. Peter's at Lindisfarne, and that others have been found at Glendalough and Clonmacnoise in Ireland, demonstrates its Celtic origin.

The highly complicated interlacing of the Lindisfarne Gospels (even granting that the illumination comes from an Irish hand, though the name "Ethelwold" sounds Anglo-Saxon) was done at a time when the Comacine and Lombard gilds had long been accustomed to produce patterns of the most varied and intricate

[1] Abbott, *Celtic ornaments from the Book of Kells.*

[2] Beda, *Hist. eccl.*

character in carving. And it was executed under the influence of centres of Latin culture like Jarrow, Monkwearmouth, and Hexham, where Benedict Biscop, Ceolfrid, and Wilfrid had formed libraries with books brought from Rome. And this influence extended in the same way to the artists of the other illuminated manuscripts mentioned above.

Another source of influence, especially in the case of the intricate interlacing sometimes with heads of animals which occurs in the "Psalterium charactere Hibernico," the "Book of Kells," and the "Evangelistarium of Mac Regol," may have been the School of St. Gall, which was in touch with the Lombard gilds on the one side, and on the other kept up relations with the clergy of Great Britain and Ireland. I have, in fact, seen in that celebrated monastery several manuscripts (one, of local origin, being of the VIIIth century) with very involved interlacing closely related to that of the English and Irish manuscripts previously referred to. I may mention an "Evangelium S. Iohannis" (VIIIth century), the "Quattuor Evangelia" (VIIIth

Fig. 542.—British Museum. Side of whalebone casket (VIIIth Century).

century), the "Homiliae S. Gregorii" (IXth century), and the "Psalterium Folchardi" (IXth century).[1]

On the other hand, there is no proof that the artists of that age derived ideas for carving from the illuminated manuscripts, and still less that they were Irish. It would indeed have been a singular anomaly if people who were so little used to stone buildings as to go on erecting wooden structures in the "Celtic" fashion through the VIIth and VIIIth centuries had been capable of producing carving of so advanced a character as we find at Monkwearmouth, Jarrow, and Hexham.

Moreover, had not Britain and Ireland suffered from a positive sterility of artists, Benedict Biscop and Wilfrid would never have incurred the heavy expense of engaging the services of foreigners. It is more reasonable to believe, as I do, that it was the instruction and the light derived from the examples left behind them by the Continental artists which guided the Anglo-Saxon carvers in the work which they undertook as their successors, resulting in the founding of a National School.

Certain it is that the productions of the Anglo-Saxon School, particularly in Northumbria where the said National School was formed, are quite distinct from the foreign work which provided it with models. In the treatment of figures, and especially of the human form, there is nothing short of a gulf between them, both

[1] Library of the former Abbey of St. Gall.

as regards design and execution. A convincing proof of this is furnished by the important whalebone box known as "the Franks Casket" in the British Museum (Figs. 542, 543). The missing portion (Fig. 544) belongs to the National Museum

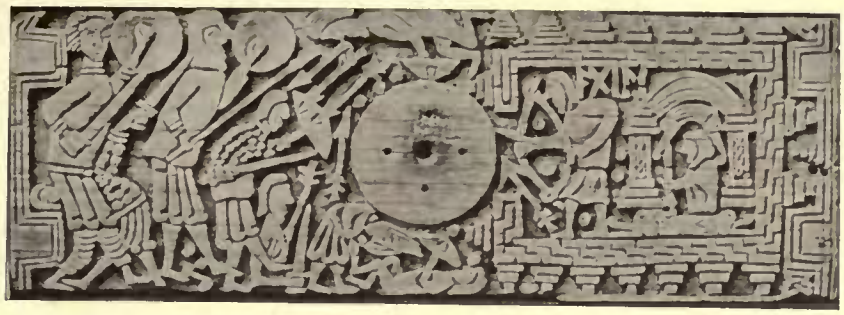


Fig. 543.—British Museum. Side of whalebone casket (VIIIth Century).

at Florence. This casket, Northumbrian work of the VIIIth century with Runic inscriptions, betrays foreign influence, *e.g.* in the scene of the wolf with Romulus and Remus, and in the canopy with supports showing interlaced ornament and a knot in a spandrel, evidently derived from a Pre-Lombardic source. The Adoration of the Magi recalls the precious remains of the oak coffin which once held the body of St. Cuthbert, now fitted together and exhibited under glass in Durham Cathedral Library, with its representations of Christ between the Emblems of the Evangelists, the Archangels, the Virgin and Child, and the Apostles, poor in drawing but freely cut with the knife or graver, and accompanied by legends in Roman and Runic characters. Anyone who looks at the human heads represented full face on the

Fig. 544.—Florence. National Museum. Missing side of whalebone casket in British Museum (VIIIth Century).

British Museum casket will not fail to perceive the relationship, especially in the oval outline of the head, between them and those on the remains of St. Cuthbert's coffin. The latter may very well belong to the year 698, or perhaps 696, as has been suggested.[1] In any case it cannot belong to a date later than 998, the view

[1] *The Victoria History of the Counties of England—History of Durham*—Kitchin, *The coffin of St. Cuthbert.*

being, on every ground, quite untenable which would place it in 1104, the year of the translation of the relics of the sainted bishop of Lindisfarne to Durham.

The productions of the Anglo-Saxon School, as reflected in motives of ornament, are also to be recognized by an interesting feature which distinguishes English work between the VIIIth and XIth centuries. This is the typical complicated interlacing in which the bands are not given a triangular or merely rounded surface but have the appearance of intestines. Numerous specimens are scattered about England, but the best are to be found in Northumbria because it was there that, under foreign influence, the School had its origin. We may mention a few of these examples, the date of which is not always easy to fix, as this treatment of interlaced work is not confined to the Anglo-Saxon period but sometimes occurs as late as the XVth century.

Fig. 545.—Hexham. St. Andrew's. Fragment of carving.

(1) The examples preserved at Monkwearmouth, Jarrow, Hexham (Fig. 545), and in Durham Cathedral Library, which contains the most important collection of Anglo-Saxon carving in England.

(2) A sepulchral cross with a Runic inscription commemorating one Cynibalth, from the churchyard of St. Mary's, Lancaster: now in the British Museum, and assigned to the late Anglo-Saxon period.

Fig. 546.—Mawgan in Pyder. Wheel-head cross (Xth Century).

(3) A wheel-head cross brought from the parish of Gwinear, and now standing outside the church of Mawgan in Pyder (Fig. 546). It is considered to be the finest example of a carved cross in Cornwall, and might be ascribed to the period following the submission of the British Church in Cornwall to the see of Canterbury in the reign of Athelstan (925–940), and the consequent introduction of Anglo-Saxon influence.

Fig. 547.—Peterborough. Cathedral. Portion of tombstone in the transept (before the XIIth Century).

Fig. 548.—Hexham. St. Andrew's. End of top of "hog-backed" tomb (Pre-Conquest).

(4) Fragments of sepulchral slabs from the ancient graveyard of Peterborough Cathedral, found in 1887 under the floor of the north arm of the transept. One of them (Fig. 547) shows the characteristic Gallic cross, interesting and very early examples of which in different forms may be seen carved on the tombstones collected in the baptistery

of Saint Jean at Poitiers. This form of cross was probably imported from France, as were also the tombstones of the type of that at St. Andrew's, Bolam, with its cross and fish-bone ornament. National English work can also be recognized in the characteristic tops of tombstones (difficult to date) of Northumbrian origin, known as "hog-backed stones," ornamented with crosses, circles, arcading, animal heads, interlacing. Interesting specimens can be seen in Durham Cathedral Library, and another in St. Andrew's church, Hexham (Fig. 548).

CHURCH OF ST. MARY AT HEXHAM.—Prior Richard of Hexham[1] describes the form of this church, which was founded by Wilfrid, and formerly stood near St. Andrew's: "in modum turris erecta et fere rotunda, a quatuor partibus

Fig. 550.—Perugia. Sant' Angelo (VIth Century).

totidem porticus habens." In other words, it was a structure of polygonal plan with four porches or vestibules, like the Roman edifice illustrated in Fig. 521.

It appears, then, that St. Mary's at Hexham was also copied from a Roman building, either one of the type to which we have just referred, or else a church with which the bishop had become familiar in the course of his travels, Santo Stefano on the Caelian, just remodelled by Pope Theodore I (642–649)[2] on the occasion of his translation of the bodies of the martyrs Primus and Felicianus from a catacomb on the Via Nomentana (Fig. 549). It was a concentric circular building with a tower, and four inserted courts, one of which was made into a chancel. Or the plan may have been derived from the octagonal Lateran Baptistery with its three chapels and narthex. In any case it is clear that St. Mary's was not, as has been suggested, an equal-armed cross with a central polygonal tower, for this does not agree with Prior Richard's brief description, and is inconsistent with William of Malmesbury's

[1] Twysden, *op. cit.*—*De statu et episc. Hagust. Eccl.*
[2] Lanciani, *The Ruins and Excavations of Ancient Rome.*

account of the new style of Athelney Abbey, of which we shall treat presently; unless the shape of a Greek cross was produced by three porches or chapels and

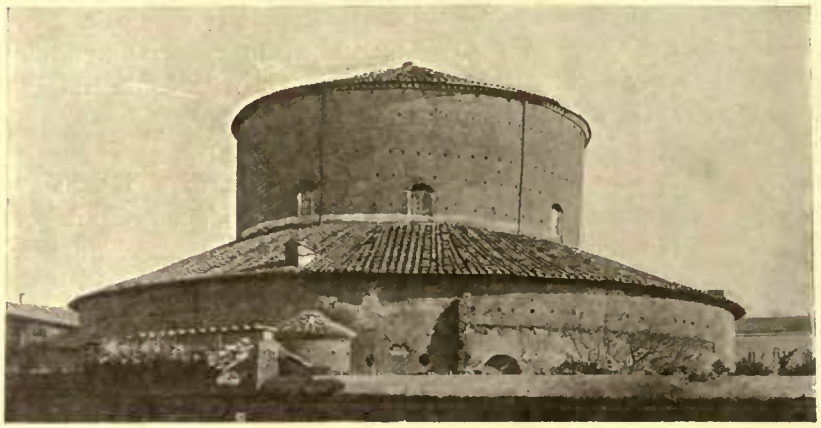


Fig. 549.—Rome. Santo Stefano al Celio (IVth and Vth Centuries).

an apsidal chancel, as in the round church or Sant' Angelo at Perugia (Fig. 550), which the latest discoveries show was provided with four projecting arms of this kind.

THE CHURCH OF ST. PETER AT RIPON was erected according to Eddius[1] by Wilfrid between 671 and 678. We gather from his account and that of William of Malmesbury that it was a basilica with two tiers of arcades with columns, like St. Andrew's at Hexham. Destroyed by the Danes in the IXth century,[2] it was rebuilt from the foundations by Roger of Pont l'Évêque (1154–1181), archbishop of York, but Wilfrid's crypt was retained. This consists of a rectangular chamber with a barrel vault, approached through a rectangular vestibule with a half-barrel vault. Both communicate with two passages roofed with stone slabs.

Fig. 551.—Corbridge. West end of St. Andrew's (VIIth Century).

ST. ANDREW'S CHURCH, CORBRIDGE, is first mentioned by Simeon of Durham under the year 786.[3] It is supposed that it was built by Wilfrid,[4] and some remains of the original structure support this. They consist of the porch, the walls of which have been raised, and the aisleless nave, remodelled at a later

[1] *Rolls Series—The historians of the Church of York and its archbishops—Vita Wilfridi episcopi.*

[2] *Rolls Series — Willelmi Malm. monachi gesta pontif. Anglorum.*

[3] *Rolls Series—Hist. Regum.*

[4] *The Reliquary*, 1893—Hodges, *The pre-conquest churches of Northumbria — Corbridge, St. Andrew's Church.*

date (Fig. 551). There is a large opening in the west end (Fig. 552), the arch of which must have been transferred bodily from the neighbouring Roman town of Corstopitum, or from the Roman Wall, and built into the church—an operation which suggests the presence of the foreign masons who worked on St. Andrew's at Hexham.

Fig. 552.—Corbridge. St. Andrew's. Interior of west end (VIIth Century).

* * *

While the churches which we have just considered were being erected through the action of the Latin Church in Northumbria, which under Oswald, Oswy, and Ecgfrid, was the most important state in the island, others were rising, or were about to rise, through the same influence in the southern districts and in Mercia.

THE CHURCH OF RECULVER was erected by Bassus under the patronage of Egbert, king of Kent (664–673) in 669.[1] There survive the foundations, and some fragments of walls above ground.

The original church consisted of a nave and aisles, with a corresponding apse, in front of which was a short presbytery, separated from the nave by three arches supported by two columns which are now set up on the north side of Canterbury Cathedral (Fig. 553).

Its importance consists in these columns on account of the capitals which surmount them; for though the shafts and bases go back to late Roman times, the capitals are the work of Anglo-Saxon hands. They, too, were originally Roman, but were afterwards re-worked by keeping the base and reducing the body of the capital to the form of three graduated abaci, chamfered at the angles. The barbarous way in which this transformation has been carried out is an indication of the abyss of decadence into which the British carvers had fallen, and also explains why Benedict Biscop and Wilfrid had recourse to foreign chisels.

THE ABBEY CHURCH OF ST. MARY AT ABINGDON, founded in 675 by its first abbot Heane with the assistance of a local chieftain Cissa, had the peculiar feature of two apses at opposite ends of the building: "et erat rotundum tam in parte occidentali quam in parte orientali."[2] It was the first church in England to

[1] *Rolls Series—The Anglo-Saxon Chronicle.*

[2] *Rolls Series—Chronicon monasterii de Abingdon—Appendix II.—De abbatibus Abbendoniae.*

exhibit this arrangement. For though the plan of the first cathedral of Canterbury given by Willis shows a western apse, it is a gratuitous addition of his. Eadmer makes no mention of it: "Finis ecclesiae ornabatur oratorio. Ad quod, quia structura eius talis erat, non nisi per gradus cuiusvis patebat accessus,"[1] and his words simply mean that the church ended at the west in a chapel, which could only be reached by several steps.

Fig. 553.—Canterbury. Columns from Reculver in the Cathedral Close (669).

The plan is of very ancient origin. For instance, the magnificent Basilica Ulpia in Trajan's Forum at Rome (112–114) had a hemicycle at either end. Montano[2] gives the plan of a Pagan Roman sepulchral edifice ending in three apses, the principal one of which is faced by a corresponding one at the opposite end of the structure (Fig. 554); and his work contains other examples of buildings with aisleless naves and two apses facing one another. Again, recent excavations at Silchester have brought to light the remains of a civil basilica with a hemicycle at either end.[3] And so the architect of St. Mary's at Abingdon would not have had to go to distant lands in search of the arrangement, for Silchester is only just outside the confines of Berkshire in which Abingdon is situated.

In Christian buildings it had been used as far back as the Vth century in the basilica of St. Reparatus near Orléansville in Algeria (324), when a new counter-apse was erected to contain the tomb of the bishop of that name (475).[4] And later, when the vestibule (in which an altar of St. Andrew had already been introduced) of the Imperial Mausoleum near St. Peter's at Rome was transformed into the basilica of Sant' Angelo,[5] the latter presented, as indeed it always had done, two apsidal ends

[1] *Rolls Series—Gervasii Cant. opera historica.*
[2] *Op. cit.*
[3] *Archaeologia*, Vol. LIII.—Fox and St. John Hope, *Excavations on the site of the Roman city of Silchester, Hants, in* 1892.
[4] Gsell, *op. cit.*
[5] De Rossi, *Inscriptiones christianae urbis Romae.*

facing one another. It has been suggested[1] that it was St. Boniface († 755) who carried the plan to Germany, but there is no evidence in existence to support the idea.

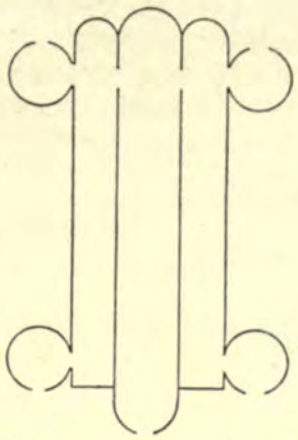


Fig. 554. — Rome. Plan of sepulchral edifice. (*From Montano, "Li cinque libri d'architettura."*)

BRIXWORTH CHURCH was built about 680, in the time of Cuthbald, second abbot of Peterborough.[2] The surviving parts of the original structure are the nave (now forming the body of the church) and portions of the presbytery and western porch (Figs. 555, 556). The internal face of the west end (Fig. 557) contains high up a three-light opening (a later addition), the arches of which are carried by baluster shafts with Pre-Lombardic cubical capitals bevelled in the lower part, surmounted by an abacus of barbarous form. The balusters do not follow the characteristic type of those at Monkwearmouth and Jarrow, but belong to a Roman type, and are the oldest specimens of the kind (for those in St. Andrew's, Hexham, are only used for a decorative purpose) employed in a church that I have discovered in England. The Pre-Lombardic cubical capitals are also the earliest examples of their kind in the

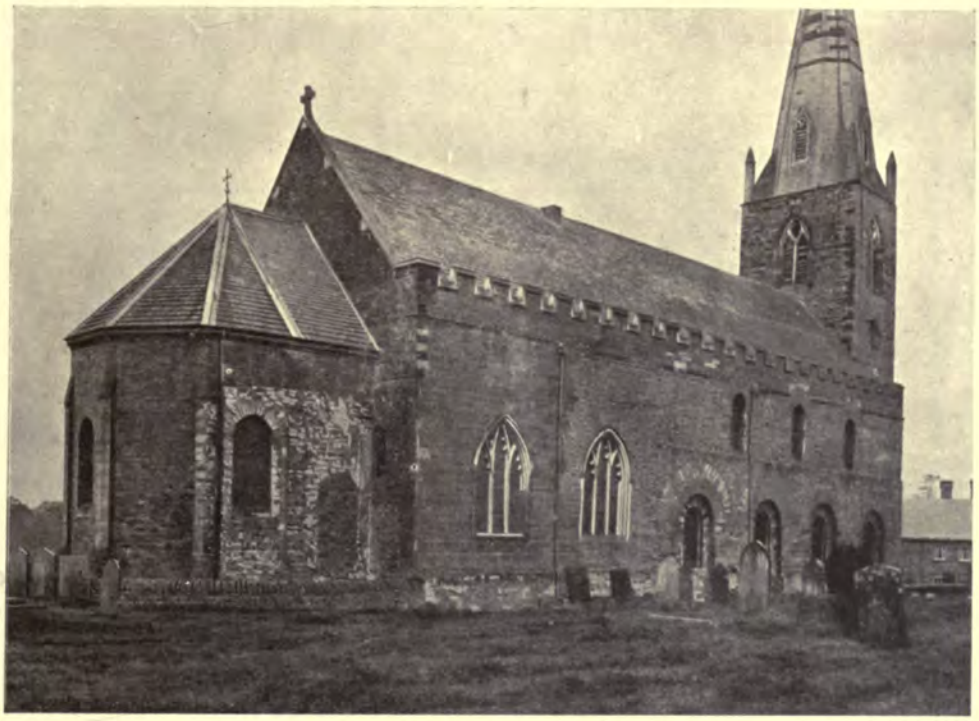


Fig. 555.—Brixworth Church (about 680).

country. Balusters of this type must have made their appearance about the end of the Xth century, and have come into fashion in the first part of the XIth, as we find them

[1] *The Archaeological Journal*, December, 1906.—Micklethwaite, *Something about Saxon church building.*
[2] Sparke, *op. cit.*—*Hugonis Candidi coenobii Burgensis historia.*

represented in English manuscripts just at that period. I may refer to one in the British Museum (Cottonian MS., Claudius B. IV.), described in the catalogue, and I think rightly, as rather earlier than the Norman Conquest, exhibiting specimens of baluster shafts, bulbous capitals formed by truncated inverted pyramids, and arcading with alternate round and triangular heads, thus showing how the activity in building in the time of Edgar, Canute, and Edward the Confessor, was reflected in the illuminations of sacred volumes.

The walls of the porch were raised and the tower built some time after 870, when the church suffered at the hands of the Danes the same fate which befell the mother-church of Peterborough, but before the Norman Conquest. The former probably took place during the peaceful reign of Edgar (959–975), who was such a benefactor to Peterborough; the latter, in the course of the new invasion of the Danes, who in 1010 had burned the neighbouring town of Northampton, and made it urgently necessary to fortify Brixworth Church.

Fig. 556.—Brixworth Church. East end (about 680).

* * *

With the organization of the Church in England carried out by Archbishop Theodore (668–690) and Abbot Hadrian (669–708)—a Church which became a national institution and prepared the way for the political unity of the country—the direct action of Rome through her missionaries came to an end, and the stream of Christian culture emanating from the City was stayed till we come to the days of Lanfranc (1070–1089) and Anselm (1092–1109). The Primatial Chair of Canterbury, which from the time of Augustine had been filled, except for a few years under Deodatus (655–664), by Italians and a Romanized Greek, received no more foreigners till 1070. And the same was the case with York, occupied till now, with the exception of Ceadda's and Bosa's tenure of the see, by an Italian, Paulinus (627–633), and an Anglo-Saxon educated on Italian lines, Wilfrid.

The withdrawal of direct Italian influence involved the cessation of the activity of the French and Italian builders and carvers, which had passed like a meteor over Northumbria. There were no longer monks from Italy to superintend the con-

struction of ecclesiastical buildings. Architecture in England must now pursue its own course with the local means at its disposal and, apparently, without external aid. And this lasted till the time of Alfred the Great (871–901), when the relations of England with the Continent once more became intimate, particularly with France, whence the learned king drew most of the intellectual influences by which he strove to raise the culture of his subjects from the low level at which he found it. These relations were resumed afresh, and with more tangible results, in the time of Dunstan (943–988), when a new current of foreign artistic influence passed over England. A similar current was felt in the reign of Ethelred II (978 or 979–1016) and Canute (1014–1035 or 1036), and becoming stronger and stronger, and finally carrying all before it, resulted in the appearance under Edward the Confessor (1041 or 1042–1066) of the "New style" of Architecture, viz. the Lombardo-Norman. Its introduction did something to vivify the inert ecclesiastical architecture of England with its barbaric ornamentation, but at the same time it sounded its knell; for the moment had come for the old, uncomely forms to make way for a new creation of youth and vigour, backed up as it was by the strong hand.

Fig. 557.—Brixworth Church. West end (about 680).

However, we must not anticipate our conclusion; and first, let us take a rapid historical survey of three dark centuries barely illuminated as it were by the spasmodic, flickering light of an aurora borealis, so that we may take stock of the conditions existing in these lands, and set out the evidence relating to their ecclesiastical monuments which is to be found in the annalists, and contains matter of interest for our purpose.

In the VIIIth century the history of England is a tale of perpetual wars for conquest and supremacy between the various states into which the nation was divided. Such was the story of intestine struggles in the kingdom of Wessex, which compelled Ine (688–728) to abandon his throne and go on a pilgrimage to Rome, where he ended his days; and this in spite of his successes in the field, the civil organization which he devised for his subjects, and the religious awakening brought about by Aldhelm, bishop of Sherborne (705–709). The result was that Wessex fell into the power of Ethelbald, king of Mercia (716–755). In the kingdom of Northumbria, again, Eadbert (737 or 738–757), resigning the sceptre to his son Oswulf (757), after the example of his predecessor Ceolwulf (731–737), retired to the monastery of Lindisfarne, while the country became the scene of discord, revolt, and slaughter; evils accentuated by fire, pestilence, famine, and, to crown all, by the

Danish inroads described by Simeon of Durham.[1] A state of things like this was not exactly favourable for the practice of architecture.

These disorders were brought to an end by the Mercian supremacy under Ethelbald, Offa (755–794 or 796), and Cenwulf (796–819 or 822), though, at the same time, it fell to pieces through the intervention of the Frankish kings in the affairs of England. Indeed, with the establishment of Eardwulf on the Northumbrian throne (795–806) and of Egbert on that of Wessex (800–836), and the outbreak of civil war in Mercia itself after the death of Cenwulf, the supremacy broke up, and the extensive kingdom which he left at his death was divided.

The supremacy of Mercia was succeeded in the IXth century by that of Wessex under Egbert, brought about by the submission of Mercia and Northumbria, and his conquest of Cornwall. But it was not of long duration. Even before his accession, and that of his successor Ethelwulf (836–855 or 856), the Danes had begun their raids, in alliance with the Britons of the West. Ethelwulf could not do more than repress these raids for a time, for in 866 the pirates, after wintering in East Anglia, first invaded Northumbria, next subdued the eastern kingdom and put to death its king Edmund (870), then the lands of Mercia, and lastly Wessex, where, however, they were compelled by the sword of the liberator, Alfred the Great (871–901), to come to terms at Wedmore (878). The last years of the IXth century were spent in more fighting between Alfred and the Danes, and the Xth opened with the determined attempt of his daughter Ethelfleda (910–918 or 922) to subdue the Danish Confederation, the "Denlag" or "Danelaw," which had taken the place of the old kingdom of Mercia and been recognized by the Peace of Wedmore. This object was achieved by Edward the Elder (901–925), who received the voluntary submission of Scotland, Northumbria, and Wales, and of the Britons in Strathclyde. Then came the wars of Athelstan (925–940) with the confederate kingdoms and with the Danes, brought to an end by his victory at Brunanburh (937), which initiated an era of peace in a reign made illustrious by the courage, firmness, and wisdom of the monarch. There followed Edmund's (940–946) reconquest of the Danish Confederation which had taken up arms against him, and Edred's (946–955) subjugation of Northumbria.

After the misgovernment of Edwy (955–959), a long period of peace succeeded in the days of Edgar (959–975). Under his rule, and with the co-operation of Dunstan, Ethelwold, and Oswald (who had been a monk at Fleury), the triad which was the source of the splendour of the reign, his people saw the restoration of order and justice, the promotion of trade and agriculture, the multiplication of abbeys, instituted not only for monastic purposes but also as places of education which, in spite of the impulse given by Alfred the Great, was well-nigh extinct. The century ended amidst famine, internal conflicts, wars between the states, and fresh Danish invasions, with their attendant rapine, fire, and slaughter, which marked the reigns of Edward the Martyr (975–978 or 979) and Ethelred II (978 or 979–1016).

The XIth century opened with Sweyn's revenge for the massacre of St. Brice's day (1002); and this was followed by repeated invasions of the Danes and finally by their conquest of England (1013), when the barbarian chief assumed the crown, and Ethelred took refuge in Normandy. Recalled in 1014, the latter made various efforts to recover the sceptre of which he had shown himself so unworthy, and his son Edmund (1016) took measures to oppose the power of Canute (1014–1035 or 1036); but the Dane, after the battle of Assandun and the death of his rival, obtained a firm seat on the throne, and in the course of a peaceful reign conferred such benefits on his

[1] *Rolls Series—Hist. Regum.*

subjects that Edgar's work was almost forgotten. He well deserved his title of Great. The disturbed reigns of Harold I (1035 or 1037–1039 or 1040) and Hardecanute (1039 or 1040–1041 or 1042) followed, and then we come to the time of Edward the Confessor (1041 or 1042–1066) and the end of the period.

When we draw up the list of ecclesiastical buildings which we know were founded, rebuilt, or restored during the epoch which we have just outlined, we find that the majority of these belong (1) to the long reign of Ine (688–728); (2) to that of Edgar (959–975), the founder or rebuilder of forty-four monasteries,[1] mainly through the instrumentality of Dunstan (943–988), Ethelwold (963–984), and Oswald (961–992); and (3) to the reigns of Canute and the Confessor, as William of Malmesbury testifies.[2] This is a perfectly natural result, the history of art exactly coinciding with the social and political history, and even more with that of religion.

Of these buildings some were merely wooden structures, like the monastery church of Doulting in Somersetshire, where Aldhelm ended his life.[3] Others were built of stone, and in some cases were so notable in that age and country that William of Malmesbury describes the church of his own abbey, St. Mary's (whether the original church erected by Aldhelm himself, as we learn from the "Gesta Pontificum," or a reconstruction by Aelfric, who became abbot in 970), as "vincens decore et magnitudine quicquid usquam ecclesiarum antiquitus factum visebatur in Anglia";[4] while Alcuin[5] is lost in admiration of the new cathedral of York built by Archbishop Albert (766–782) under the direction of Eanbald and Alcuin himself, to replace the old one burned in 741.[6]

With regard to the form of some of these churches and their architects very instructive information has come down to us. We know, for instance, that Winchester Cathedral, founded in 639, at the desire of Cynegils King of Wessex (611–642 or 643) and with the permission of his son Cenwalh (642 or 643–672), by Bishop Birinus, who had been sent by Honorius I to convert the West-Saxons,[7] [8] was in 863 reached through an atrium which had a tower rising from the middle of the side parallel to the front of the church.

Turris erat rostrata tholis, quia maxima quaedam,
Illius ante sacri pulcherrima limina templi,
Eiusdem sacrata Deo sub honore hierarchi.
Inter quam templique sacram pernobilis aulam
Corpore vir Domini sanctus requievit humatus,[9]
. . . . . .

Whether this tower went back to the time of Birinus or was erected later, we do not know. In connection with it I would remark that in the Old St. Peter's at Rome the façade of the atrium showed an entrance flanked by two towers, the first built by Stephen II (752–757), who gave it three bells, the second by Hadrian I (772–795).[10] [11]

[1] Sparke, *op. cit.*—*Chronicon Johannis abb. S. Petri de Burgo.*
[2] *Rolls Series—Gesta regum Anglorum.*
[3] [4] *Rolls Series—Willelmi Malm. monachi gesta pontificum Anglorum.*
[5] *Rolls Series—The historians of the Church of York and its archbishops—De pontificibus et sanctis Ecclesiae Eboracensis carmen.*
[6] *Rolls Series—Symeonis monachi Historia Regum.*
[7] *Rolls Series—Annales monasterii de Wintonia.* [8] *Rolls Series—The Anglo-Saxon Chronicle.*
[9] Mabillon, *Acta Sanct. Ord. S. Benedicti—De S. Swithuno eipiscopo Wintoniensi, eiusque translatione et miraculis.* [10] Duchesne, *Le liber pontificalis.*
[11] Plan by Alfarano in the Archivio Capitolare of St. Peter's.

It is also stated that the little church of the monastery at Athelney, founded by Alfred the Great (871–901), was built in a new style ("Fecitque ecclesiam, situ quidem pro angustia spatii modicam, sed novo edificandi modo compactam"[1]) and with a plan somewhat like that of the church at Germigny des Prés (801–806): "quattuor enim postes solo infixi totam suspendunt machinam, quattuor cancellis opere sperico in circuitu ductis."[2] Its architect, too, is known to us, for there can be little doubt that the John, presbyter and monk, a native of Old Saxony, who was invited from his convent of Corbie by Alfred to become abbot of Athelney, may reasonably be regarded as responsible for the building, knowing as we do that he was "in omnibus disciplinis litteratoriae artis eruditissimus et in multis aliis artibus artificiosus."[3] I believe, in default of proof to the contrary, that this church marks the introduction of the central cupola plan into England, for we must imagine that the four isolated supports carried a square tower over the crossing.

Again, we know that Ramsey Abbey Church, founded in 969 by Oswald, bishop of Worcester (961–992) and archbishop of York (972–992), with the assistance of Earl Ailwin, and consecrated in 974, was of cruciform plan with two towers, one over the crossing and the other at the west end. "Duae quoque turres ipsis tectorum culminibus eminebant, quarum minor versus occidentem in fronte basilicae pulchrum intrantibus insulam a longe spectaculum praebebat, maior vero in quadrifidae structurae medio columnas quatuor, porrectis de alia ad aliam arcubus sibi invicem connexas, ne laxe defluerent, deprimebat."[4][5] Oswald himself was the architect of the building, the idea of which he may have derived from the church of Germigny des Prés, situated only a few miles from the convent of Fleury at Saint Benoît sur Loire, with which Ramsey Abbey was closely connected for several centuries. Fleury was a centre of instruction in the liberal arts, as the Ramsey Chronicle tells us: . . . virum nominatissimum Abbonem, qui liberalium artium notitiam imis hauserat medullis, de coenobio Floriacensi evocatum." Now Theodulf's church, besides the existing central tower, had another, used for the bells, rising above the porch at the entrance, thus described in an account printed by Baluzius:—"Porro in matherio (read 'narthecio' or 'atrio') turris de qua signa pendebant, huiuscemodi inseruit versus argenteo colore expressos."

Haec in onore Dei Theodulfus templa sacravi,
Quae dum quisquis ades oro memento mei.[6]

The church at Saint Riquier (Centula) (793–798) also possessed a tower in front of the apse, and another between the church and its narthex. Again, St. Remy at Rheims, as rebuilt by Archbishop Turpin (756–802) and finished by Hincmar in 852, had a large tower at its western end. The western tower of the church at Blandigny, consecrated in 979,[7] may have been suggested by the examples at Saint Riquier and Rheims.

Soon after the central tower of Ramsey was finished it threatened to fall, and had to be reconstructed. This was carried out by Abbot Eadnoth the younger under the advice of Oswald, and the whole church was rebuilt in 991. Ramsey had an aisleless nave. Aisled churches with central towers, as has been pointed out,[8] did not

[1] [2] *Rolls Series—Willelmi Malm. monachi gesta pontificum Anglorum.*
[3] Mabillon, *Acta Sanct. Ord. S. Benedicti—Venerabilis Johannis abbatis Aethelingiensis elogium historicum.*
[4] *Rolls Series—Chronicon abbatiae Rameseiensis.*
[5] *Rolls Series—The historians of the Church of York and its archbishops—Vita Oswaldi archiep. Eboracensis.*
[6] *Miscellanea—Catalogus abbatum Floriacensium.* [7] *Mon. Germ. Hist.—Annales Blandinienses.*
[8] *The Archaeological Journal*, December, 1906—Micklethwaite, *Something about Saxon church building.*

make their appearance in Great Britain before the time of Edward the Confessor. The example of Winchester brought forward by Prof. Willis (in the volume on Winchester, published by the Archaeological Institute) and others is imaginary. The rebuilding of the cathedral was begun by Ethelwold during his tenure of the see (963–984), and the dedication took place in 980;[1 2] but apparently it was finished by his successor Alphege (984–1005), as may be gathered from a letter addressed to the latter by the monk Wulstan.[3] All we know about it is that it had a tower and atrium with chapels on its north and south sides: we hear nothing about a nave with aisles.

As Athelney is the first recorded cruciform church with a central tower in Great Britain, so Ramsey is the earliest recorded example of a western tower. Nevertheless, the arrangement of a tower in the middle of the west front may be traced back in England to the reign of Edward the Elder (901–925), for on a coin of his time struck by one Wlfgar there appears what seems to be an aisleless church with a frontal tower rather higher than the nave (Fig. 558). And here I may say that

Fig. 558.—British Museum. Coin of Edward the Elder (901–925).

Fig. 559.—British Museum. Coin of Edward the Elder (901–925).

Fig. 560.—British Museum. Coin of Edward the Elder (901–925).

towers are frequently represented on Edward's coins, which is to be explained by the fact that he and his sister Ethelfleda backed up their operations against the Danes by the construction of strongholds in many places (Figs. 559, 560).

Nor were these the only churches erected in an imported foreign style during the period we are discussing—the style introduced into the Frankish Empire in the days of Charles the Great. The original church at Abingdon (675) having been seriously damaged by the Danes in the IXth century, Athelstan gave orders for its reconstruction, and this was carried out under Edgar (959–975) by Ethelwold, who had been a monk at Glastonbury, and was now abbot of Abingdon: "Erat namque Atheluuoldus magnus aedificator"[4]—"tot et tanta monasteria fecit quod vix modo credibile videatur."[5] The new church of St. Mary at Abingdon is thus described:—"Cancellus rotundus erat, ecclesia et rotunda duplicem habens longitudinem quam cancellus; turris quoque rotunda erat."[6] This implies that it was a round church, with an apse and a round central tower.

The abbey church of Exeter (a cathedral after 1050) as rebuilt by Canute in 1019, in place of the one erected by Athelstan and destroyed by the Danes in 1003, possessed not only a central tower, but also two others which flanked the west front. The evidence for this is the reverse of a seal of the old Chapter of Exeter attached to a document of 1133.[7] This church of SS. Mary and Peter is the first historical instance in England of a pair of western towers. I have found another and nearly

[1] Wharton, *Anglia Sacra*—T. Rudborne, *Historia maior Wintoniensis.*
[2 3] Mabillon, *Acta Sanct. Ord. S. Benedicti—Vita S. Ethelwoldi episcopi.*
[4] *Rolls Series—Chronicon monasterii de Abingdon—Appendix I.—Vita S. Aethelwoldi.*
[5] *Rolls Series—Willelmi Malm. monachi gesta regum Anglorum.*
[6] *Rolls Series—Chronicon monasterii de Abingdon—Appendix II.—De abbatibus Abbendoniae.*
[7] Oliver, *Lives of the Bishops of Exeter.*

contemporary representation of a church front with two towers in the "Poems of Caedmon,"[1] assuming that the manuscript belongs to the first half of the XIth century. The adoption of this arrangement was due to the influence of the Lombardo-Norman style which had by this time made its appearance in William of Volpiano's church at Bernay (1013). His employment of it goes back to the erection of Saint Bénigne at Dijon (1002–1018), where we know that a pair of staircases were formed in the wall of the west front (the "pariles scalas" of the Abbey Chronicle) communicating with the galleries of the church. And William, in his turn, derived it from the mother church of Cluny, dedicated in 982.

This influence, showing itself in the form selected for the church at Exeter, is explained, as is the case with all the English buildings erected between 1000 and the Norman Conquest (1066), by the consequences resulting from the marriages of Ethelred II (1012) and of Canute (1017) with Emma (1002–1052), the daughter of Richard the Fearless, Duke of Normandy (943–996). These events opened the way for the Normans to get a foothold in the island, and made possible its ultimate conquest.

Let us now pass in review the dated churches, wholly or partially preserved, or at least known to us by descriptions or drawings, which have escaped not so much the destructive hand of time as the violence of human passions, the rage for novelty which came in with the Norman Conquest and the invention of the Pointed style, and, last but not least, all the crimes committed in the name of "restoration" during the last century.

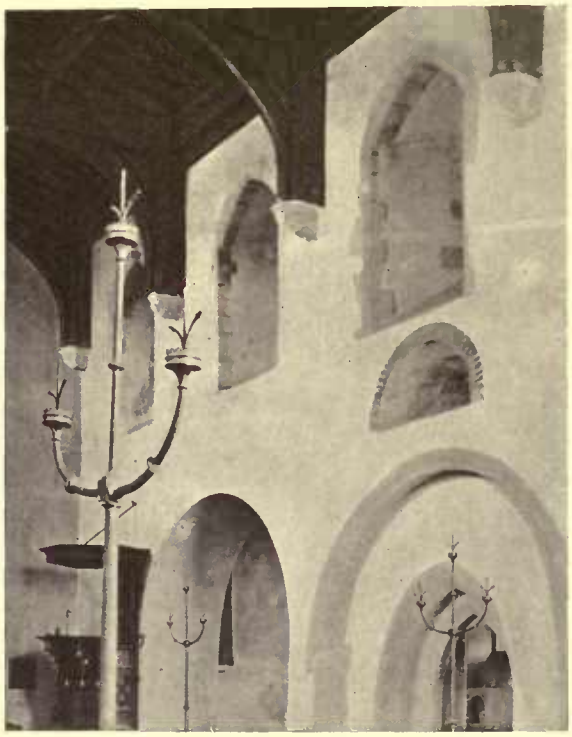


Fig. 561.—St. Albans. Church of St. Michael. Nave (about 950).

ST. MICHAEL'S CHURCH, ST. ALBANS, was built by Abbot Wulsin about the year 950.[2] It consisted of a nave ending in a rectangular chancel, and a tower at the west end. All that is left of this, after successive alterations and the deplorable ill-treatment inflicted under the pretext of restoration, is the remodelled nave (which has been lengthened westwards, involving the demolition of the tower) and the chancel (Figs. 561, 562). The only notable feature presented by the church is the double splay of the windows, the earliest dated instance to be found in England. It is evident that this form of aperture, of Roman origin, as we saw when dealing with the church at Bagnacavallo, was late in making its appearance in England.

CHURCH OF SS. MARY AND ETHELBURGA AT LYMINGE (KENT).—Queen Ethelburga's church (640), which had been practically destroyed by the

[1] Bodleian Library, Oxford.

[2] *Rolls Series—Tho. Walsingham—Gesta abbatum monasterii S. Albani.*

Danes (804), was rebuilt by Archbishop Dunstan in 965.[1] [2] What remains of his work consists of the aisleless nave, altered on the north side by the addition of an aisle, and with a rebuilt west front; and the rectangular chancel (Fig. 563). It is the earliest dated instance in England of an undoubted rectangular and not apsidal sanctuary.

Fig. 562.—St. Albans. Church of St. Michael (about 950).

DURHAM CATHEDRAL.—As the original church (998) ("honesto nec parvo opere"[3]) of Bishop Aldhun (990–1019) has given place to the existing cathedral, the work of Bishop William of St. Carilef (1080–1096), it would not concern us further were it not for the recent discovery in the foundations of the Chapter House, demolished in 1796, of the heads of four sculptured grave-crosses. These are now to be seen in the Cathedral Library, and show representations of, among other things, the Crucifixion, Baptism, and the Agnus Dei. As we can date them with certainty, they are very valuable for purposes of comparison, and this is why they are deserving of our attention. We give illustrations of two of the fragments which, in spite of the rudeness of the ornamentation and the elementary treatment of the figures, are nevertheless of great interest both in their general outline and in the details, and provide us with definite information about the style of carving in an important religious centre of Northumbria (Figs. 564, 565).

Fig. 563.—Lyminge Church (965).

These relics of the primitive cathedral recall another carving preserved in the Library, a portion of a figure cross (Fig. 566) brought from St. Mary's, Gainford, built by Ecgred, bishop of Lindisfarne (830–845), for the monastery which existed as early as 801, and given to Durham

[1] Jenkins, *A sketch of the life of St. Ethelburga the Queen.*
[2] G. Gilbert Scott, *Essay on the History of English Church Architecture.*
[3] *Rolls Series—Symeonis monachi hist. Eccl. Dunelm.*

by Bishop Aldhun.[1] For though it presents analogies with the Durham fragments, there are differences in the treatment of the drapery; and this, together with its

Fig. 564.—Durham. Cathedral Library. Head of cross (Xth or XIth Century).

Fig. 565.—Durham. Cathedral Library. Head of cross (Xth or XIth Century).

ruder character, makes me think that the Gainford Cross belongs to the IXth or Xth century, and before the reign of Edgar.

Fig. 566.—Durham. Cathedral Library. Fragment of cross from Gainford (IXth or Xth Century).

I would remark at this point that we have reached the age of Dunstan without having met with any dated English building showing the characteristic long and short work which we first noticed at Monkwearmouth (675). We may, then, reasonably infer that this feature did not gain a new lease of life and become the fashion till after the erection of St. Michael's at St. Albans, and of Lyminge Church. But it must not be supposed that it was confined to the Anglo-Saxon period, for it is well known that there are instances of it in Norman times.

THE CATHEDRAL OF OXFORD.—Christ Church, Oxford, the old convent church of St. Frideswide, originally founded by Didanus and his daughter Frideswide about the year 727, and burned in 1002, was rebuilt by Ethelred the Unready (978 or 979–1016) after 1004.[2][3] Of the church of Didanus and Frideswide nothing is left that can be seen.[4] The remains of a three-apsed east end which came to light in 1887, are to be assigned to Ethelred's work (Fig 567). This plan is not found in England before

[1] *Rolls Series—Symeonis monachi opera—Historia Regum—Historia Eccl. Dunelm.—Historia de S. Cuthberto.*

[2] *Rolls Series—Willelmi Malm. gesta pontificum Anglorum.*

[3] Dugdale, *op. cit.*

[4] *The Archaeological Journal*, December, 1906—Micklethwaite, *Something about Saxon church building.*

the XIth century ; unless, indeed, the relics of the ancient church at Lindisfarne can be referred to the time of Athelstan (925–940), a date which has still to be demonstrated. Ethelred's masonry is coarse and irregular. Until the contrary has been proved, we may say that his church was the first to have the three-apsed plan in England. It was an arrangement of Pagan Roman origin, as we saw when discussing St. Mary's, Abingdon.

Fig. 567.—Oxford. Cathedral. Frontal arch of lateral apse of old church of St. Frideswide (XIth Century).

Shortly after the erection of Ethelred's church at Oxford another English structure came into existence, interesting for the material of which it is constructed. This is the chapel set up near Aungre (Chipping Ongar) on the occasion of Alwin's translation of the relics of St. Edmund from London, which took place in 1013, or perhaps not until 1020, when Canute installed Benedictine monks at Bury St. Edmunds and erected a stone church there, consecrated in 1032, to replace the original wooden one.[1] [2] [3]

The chapel still exists as the nave of Greenstead Church (Fig. 568), its walls formed of oak trunks sawn in half and set upright side by side with the plane surface inwards. It enables us to realize what English timber construction was like in the Anglo-Saxon period.

Fig. 568.—Greenstead Church (XIth Century).

ST. MARY'S CHURCH, STOW (LINCOLNSHIRE), was built by Eadnoth II, bishop of Dorchester (1034–1049), about the year 1040, with the assistance of Earl Leofric († 1057) and his wife Godiva. Remigius, bishop of Dorchester and Lincoln (1067–

[1] Baldwin Brown, *Ecclesiastical architecture in England from the conversion of the Saxons to the Norman Conquest.*

[2] Dugdale, *op. cit.*

[3] *Rolls Series—Memorials of St. Edmund's Abbey.*

Fig. 569.—Stow Church. South side of transept and choir (XIth and XIIth Centuries).

1092), rebuilt it before 1076, that is to say before his introduction of Benedictine monks.[1] [2] Though there is no documentary evidence, many [3] consider the upper limb of the cross to be work of the XIIth century, belonging to the time of Bishop Alexander of Lincoln (1123–1148), or perhaps erected after the fire from which Stow is believed to have suffered in 1156.[4]

The oldest portions of St. Mary's are the result of three separate operations. It is a cruciform church with central tower (Fig. 569). The windows and doors show long and short work in the jambs. The imposing arch with multiplied moulded archivolts (Fig. 570) forming the communication between the aisleless nave and the crossing, has bulbous bases like the striking examples in the Bodleian "Caedmonis Paraphrasis Poetica" (where the capitals are also of the same form), believed to have been executed later than the epoch of 1000, but before the Conquest. And there are other instances in the "Liber Geneseos" in the British Museum, to which we have already referred, dated rather before 1066.

Stow Church affords the earliest dated examples in England of protuberant bulbous bases. The employment of this characteristic feature in the form of substantial roll mouldings in the north and west doors of the church, and its presence in the oldest part of the crypt of St. Servatius at Quedlinburg (936), show how cautious we should be in attributing buildings where it occurs to the Anglo-Saxon period.

Further, it provides the earliest

Fig. 570.—Stow Church. Crossing and choir (XIth and XIIth Centuries).

[1] *Rolls Series—Willelmi Malm. gesta pontificum Anglorum.*

[2] *Rolls Series—Symeonis monachi historia regum.*

[3] *Journal R.I.B.A.*, Third Series, Vol. VI —Bilson, *The beginnings of Gothic Architecture.*

[4] Madox, *History of the Exchequer.*

surviving dated instance in England of a compound arch with roll mouldings. The design was of Norman origin, for in the Lombardo-Norman style extensive use was made of it. The somewhat uncouth manner in which it is introduced at Stow is explained by the different artistic conditions of the two countries.

THE CHAPEL OF THE TRINITY AT DEERHURST was built in 1056 by Duke Odda, as we are told by an inscription in the Ashmolean Museum at Oxford, whither it was removed in 1675. It consists of a rectangular space opening at the east into a chancel of the same form, of which only portions remain. The surviving door on the north side and the chancel arch diminish in width towards the top and have a hood mould over them. The jambs are constructed with long and short work (Fig. 571).

Fig. 571.—Deerhurst. Chapel (XIth Century).

ST. GEORGE'S CHURCH, KIRKDALE, NEAR KIRBY MOORSIDE (YORKSHIRE), was rebuilt by Orm in the reign of Edward the Confessor, and when Tosti was Earl of Northumbria (1055–1065), as we are informed by an inscription on either side of the sundial inserted in the wall above the south door.

The original structure consisted of an aisleless nave with rectangular chancel. On the outside various carved fragments from the ancient monastery of St. Gregory may be observed, which have been used in the building of the church. The most important is a gravestone built into the wall near the ground on the north side, with part of a cross surrounded by scroll work. In spite of its decayed state we are still able to see that it is of high quality, though the hand of the carver was not very sure. The intestinal treatment of the interlacing induces us to ascribe the work to an English carver under the influence of the Continental artists of the time of Benedict Biscop and Wilfrid, and before the Danish ravages of 867. The evidence is too slight and uncertain to support the suggestion that it is the gravestone of Oidilwald, King of Deira (651–660); and, moreover, he was buried at Lastingham.

In the jambs of the west door are inserted two shafts with Pre-Lombardic cubical capitals hollowed out at the angles and carrying two high, moulded impost blocks from which spring the multiplied archivolts. It forms the prototype for doorways of this kind in Great Britain, and its capitals are the earliest dated specimens in the country of the Pre-Lombardic cubical type with chamfered angles. An older though only

approximately dated example exists at Brixworth in the capitals of the three-light opening in the inner face of the west end.

THE ABBEY CHURCH OF ST. PETER, WESTMINSTER.—The exact date of the building which the Confessor intended to be the chief monument of his reign is unknown. According to Mabillon[1] it was erected between 1060 and 1065. Freeman,[2] on the other hand, puts it between 1051 and 1065. Micklethwaite,[3] in his turn, relying on the oldest description we possess of the church, contained in a life of the king[4] written after the battle of Stamford Bridge (1066) and before the death of Queen Edith (1043–1075), believes that at Edward's death only the eastern part of the structure begun in 1055 was in existence. It appears to me that this date would be confirmed by Edward's transfer of some of the property of Pershore to Westminster between 1054 and 1056. The building will have been finished afterwards, *i.e.* some time before 1150; so that the later description in another Life of Edward, dedicated to Eleanor of Provence, wife of Henry III (1216–1272), and written about 1245,[5] will refer to the whole period between 1055 and 1150.

Fig. 572.—Bayeux. Detail from the Tapestry (XIth Century).

It is my belief that the surest evidence as to the date of Edward's work is to be found in the Bayeux Tapestry. This important relic, which I have examined on several occasions, can only belong to the reign of William I, the chief figure in the great drama of the Conquest of England, whose defence and glorification are the main purpose of all the scenes therein unrolled. Moreover, it must have been made in the time of Odo I, bishop of Bayeux (1050–1097), the rebuilder of the cathedral to which the tapestry belonged, and in the nave of which it was exhibited in past times, as we learn from an inventory of 1476. To be precise then, it was made between the battle of Hastings (1066) and the consecration of the cathedral. To a period practically contemporary with the battle, and anterior to the death of the Conqueror (1087) belong the coats of mail worn by the figures, with the sleeves only reaching to the elbow (Fig. 572), whereas soon after 1087 they were made longer, so as to come down to the wrist, and at the same time wider than the sleeves of 1100 to 1120. I derive this statement from a communication made to me by the eminent authority, Professor Oman of Oxford, and from one of his works.[6] The numerous representations of buildings never show the pointed arch, the great characteristic of the last third of the XIIth century, to which (contrary to the

[1] *Annales Ord. S. Benedicti.* [2] *Op. cit.*
[3] *The Archaeological Journal*, 1894—*Further notes on the abbey buildings at Westminster.*
[4] *Rolls Series—Lives of Edward the Confessor—Vita Aeduuardi regis.*
[5] *Rolls Series—La estoire de Saint Aedward le Rei.*
[6] *A History of the Art of War.*

general opinion placing it between 1066 and 1080) the Tapestry has been assigned [1] on the supposition that it was inspired by the "Roman de Rou" of Wace, without taking account of the possibility of Master Wace having derived his ideas from the facts recorded on the tapestry in Bayeux Cathedral of which he was for nineteen years a prebendary.[2]

The date thus established is confirmed by the pictorial representation, partly in section and partly in elevation, of Westminster Abbey, which the tapestry contains (Fig. 573). Though the figure of a man engaged in fixing a weather-cock as a finial on the sanctuary roof is an allusion to the consecration, and while the central tower

Fig. 573.—Bayeux Tapestry. Representation of the old church of Westminster (XIth Century).

is reproduced with elaborate detail, there is no sign of the two western towers mentioned in the Life of Edward dedicated to Queen Eleanor :

En miliu dresce une tur,
E deus en frunt del Occident.

So that we may infer that the church was unfinished when the tapestry was worked, and this also explains why the author of the oldest Life makes no mention of the western towers. The incomplete state in which the building was left seems to me to be also shown by the liberal endowment, on a larger scale than that of Edward, given by the Conqueror to the Abbey.[3]

Edward's church was of cruciform plan, with a central tower, nave and aisles, chapels in two stories projecting from the transepts, and an apsidal choir with ambulatory. We learn the last detail from the fact that in 1220 the old Lady Chapel was added at the east end of the choir, so that the latter must have been provided with an ambulatory, if there was to be access to the chapel. All that is left under the floor of the present presbytery is three bases of the compound piers of the choir, which with their shallow mouldings recall those at Jumièges. Some idea of its construction is given by the so-called Chapel of the Pyx in Westminster Abbey, with its rude unraised cross vaulting. In this chapel the foliage capital of the wall pier on the south side is work of the XIIth century.

The name of the architect has not come down to us, but we learn that the church

[1] Marignan, *La tapisserie de Bayeux.*
[2] Taylor, *Master Wace, his Chronicle of the Norman Conquest from the Roman de Rou.*
[3] *Rolls Series—Willelmi Malm. gesta pontificum Anglorum.*

was in a new style : " Ecclesiam aedificationis genere novo fecit."[1] Now, seeing that a new architectural style is not born in a day, and that, after the erection of Ramsey Abbey Church (969), the cruciform plan with aisleless nave was reproduced in England with monotonous regularity, while the Latin cross plan with central tower and aisled nave, of which the Normans had made a speciality, did not make its appearance there until the building of the church at Westminster, it is quite certain that it was from Normandy and from the Benedictine Order that the Confessor derived the design of his building.

The ties uniting the last survivor of the race of Cerdic with the country and the Order which had received him as a fugitive (1013) in the days of his boyhood, with his mother Emma and his brother Alfred, were too strong for him not to indulge his love of monasticism by the erection of a sanctuary which was to be the expression of all that was dearest to his heart, and of his affection for Normandy and the Benedictine Order. To carry out this design who would be more fitted than some monk of the School of Fécamp, whose abbot, John of Aglié, stood so high in the favour of the English king, or else some member of the abbey of Bec which the genius of Lanfranc was at that moment rendering so conspicuous ?

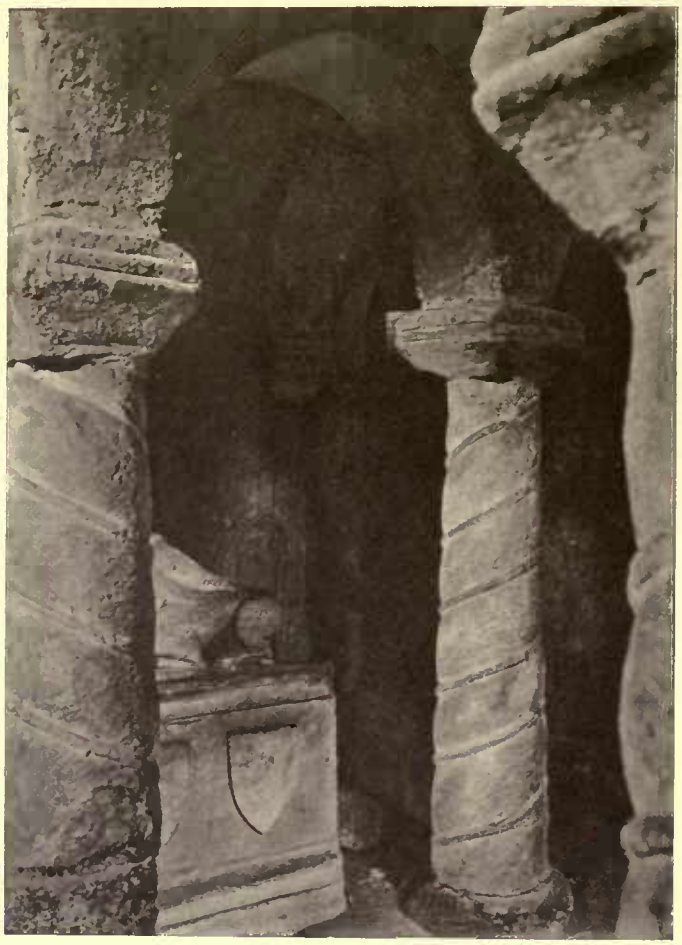


Fig. 576.—Repton. Crypt of the church (Xth or XIth Century).

Westminster Abbey was not only the first church in England planned as a Latin cross, with nave and aisles and a tower rising above the crossing ; it was also the first example of an apsidal choir surrounded by an ambulatory.

We will now proceed to describe some well-known churches, about which we possess incomplete or misleading historical notices, but which are still regarded by universal consent as belonging to the Anglo-Saxon period. Our object is to endeavour to date them within limits of greater precision, and, so far as may be, with certainty.

ST. WISTAN'S CHURCH, REPTON.—In 850 the body of St. Wistan was deposited in the church at Repton, but it was afterwards moved by Canute to

[1] *Rolls Series—Willelmi Malm. gesta pontificum Anglorum.*

Evesham about 1034.[1] The erection of the church is ascribed to the Scotsman Diuma, bishop of Mercia, one of the missionaries brought by King Peada (656–657) from Lindisfarne to help in the conversion of his subjects. When Repton fell into the hands of the Danes in 874,[2] it must have succumbed to the fate which befell all Christian buildings in the districts conquered by these barbarians, and there is every probability that the church dates from the reign of Edgar (959–975).[3]

Fig. 574.—Repton. East end of the church (Xth or XIth Century).

Of the building thus assigned to the Xth century there survive incorporated in the present church, though not in their original condition, the rectangular chancel with the crypt beneath it, besides some traces of the aisleless nave and transept. On the exterior the original parts of the chancel have a stringcourse supporting slim lesenas ending in curious capitals consisting of inverted truncated pyramids with a rude necking (Fig. 574). I remarked some of the same pattern in the Bodleian "Caedmonis Paraphrasis Poetica."

Fig. 575.—Tivoli. Villa of Hadrian. Praetorium (125–135).

Here I would note, if only in the interest of facts, as against the statements of various writers, that lesenas have nothing to do with Germany, their origin being Italian, just as their name is Italian; a fact already noticed by Hübsch.[4] The truth is that, long before their appearance in German lands, they had been used, first of all by the Romans in the manner that may be seen on the exterior of the so-called Praetorium in Hadrian's Villa at Tivoli (125–135) (Fig. 575), then by the architects of Ravenna, and thirdly by the Comacine or Lombard gilds.

In the south porch of the church are preserved two shafts which unquestionably belong to the church. They have rude capitals like those in the crypt. This crypt (Fig. 576) has rough vaulting sustained by pillars which swell out as if compressed by

[1] *Rolls Series—Chronicon abbatiae de Evesham.*
[2] *Rolls Series—The Anglo-Saxon Chronicle.*
[3] Cox, *Notes on the churches of Derbyshire.*
[4] *Op. cit.*

the spiral band which encircles them. They have bulbous bases, and rudimentary capitals chamfered off to fit the shafts. The fact that the walls of the chancel slightly impinge on the vaulting of the crypt has given rise to a suggestion that they are not of the same date; but the capitals mentioned above make this impossible.

Assuming the church and the crypt to be contemporary, let us proceed to the question of date, which we can fix with approximate certainty by a process of elimination.

Before the time of Augustine (597–605) there is no record in England of a crypt with columns under a chancel. The crypt of Christ Church, Canterbury, was copied from the one in St. Peter's at Rome,[1] that is to say it had an ambulatory or corridor following the curve of the apse, from the centre of which started a passage at right angles to the chord of the apse leading to the chamber over the tomb of St. Peter.[2 3] It was on the model of the crypts of St. Peter's at Rome and Christ Church, Canterbury, that those constructed by Wilfrid at Hexham and Ripon were planned; for they, too, had underground passages leading to a space which communicated with the chamber containing the relics. But this does not make it even remotely possible that the earliest church at Repton, which was probably of wood, as it was erected under the influence of Lindisfarne, possessed a crypt with aisles separated by columns. So that we are obliged to date it in the days of Athelstan, after the battle of Brunanburh (937); or more probably in the peaceful reign of Edgar, after Edmund (943) had broken the back of the fresh Danish rebellion, but in the last years of the reign, inasmuch as St. Michael's at St. Albans (about 950) and Dunstan's church at Lyminge (965) still exhibit a system of absolutely plain wall surfaces.

The introduction into England of wall decoration by lesenas, and later by arcading, or by a combination of arcading and lesenas, was due, I believe, to the influence of buildings such as the abbey church of Gernrode (968), in which the eastern apse is decorated with a range of pilasters and another of engaged columns, while the western towers are embellished with an arcade of alternate round and triangular-headed arches. The marriage of the devout Edith († 947), daughter of Edward the Elder (901–925), with Otto the Great (936–973) must have brought the Anglo-Saxon clergy into communication with Old Saxony and its monuments; and it is thence that they may have derived the idea of such decorative motives rather than from Italy (though it remains true that it was in Italy that lesena and arcade decoration was created), seeing that, though triangular-headed arcading appears in Italian carved representations, it is very rare to find it used there in the decoration of buildings. Moreover, the capitals at Repton of inverted, truncated, pyramid form, or with barbarous, rude mouldings, and also the bulbous bases and spiral columns, suggest German influence derived from the crypts of St. Wipertus (936) and St. Servatius at Quedlinburg (936). However, it is certain that, so far as arcading is concerned, if we confine ourselves to existing dated monuments, on the one hand, England has no architectural decoration of this kind to show before the close of Edgar's long reign, while, on the other, it made lavish use of it before the Norman invasion. And so, English buildings which show this treatment are to be dated between 965 and 1066; and as the disastrous reign of Ethelred II was anything but favourable to architectural development, we may reasonably suppose that such

[1] *Rolls Series—Gervasii Cantuariensis opera historica.*
[2] Rohault de Fleury, *La Messe, études archéologiques sur ses monuments.*
[3] De Rossi, *Inscriptiones christianae urbis Romae.*

embellishments began to be used under Edgar, and that they were afterwards elaborated in the times of Canute and of the Confessor.

We will conclude by remarking that the church and crypt of Repton were certainly built before 1034, the year in which Canute removed the relics of St. Wistan, for we know that crypts were constructed on purpose to receive the bodies of saints. And therefore the date must be fixed some time in the second half of the Xth, or at latest in the first years of the next century.

THE ABBEY CHURCH OF ST. MARY, DEERHURST.—We know that the abbey was certainly in existence in 804; that it was destroyed by the Danes; that Alphege, bishop of Winchester (984–1005) and archbishop of Canterbury (1005–1011), there received the monastic habit; that it was still an abbey in 1006; that Edward the Confessor deprived it of its possessions in order to endow the abbeys of Westminster and Saint Denis at Paris; and that finally it became a cell of the latter between 1054 and 1056.[1][2][3][4] It is also stated that in 1016 Canute and Edmund had a meeting there, though there is some disagreement among the annalists about the locality, the Anglo-Saxon Chronicle placing it at Olney, near Deerhurst.[5]

Fig. 577.—Deerhurst Church (Xth Century).

The presence of Alphege at Deerhurst proves that the abbey had been restored after the damage which it had suffered from the Danes, and this probably took place in the reign of Edgar, to which we may assign the oldest portions of the church (though no longer in their original condition), that is to say, the aisleless nave with two quasi-transept chapels, and a tower porch. The suggestion that the whole was rebuilt by the Confessor, and consecrated in 1056[6] cannot be entertained, for that date belongs to the chapel of the Trinity which we have described above.

The nave terminated in an apsidal sanctuary, of which traces remain, andthough

[1] Dugdale, *op. cit.* [2] Wharton, *op. cit.*—Osbern, *Vita s. Elphegi arch. Cantuariensis.*
[3] Butterworth, *A short account of the ecclesiastical buildings at Deerhurst, Gloucestershire.*
[4] *Rolls Series—Chronica magistri Rogeri de Houedene.*
[5] *Rolls Series.* [6] Dugdale, *op. cit.*

Fig. 578.—Deerhurst Church. Chancel arch (Xth Century).

these show a different style of masonry from that of the rest of the original structure (Fig. 577) they are none the less contemporary with it.

The rectangular western tower had originally a double porch, of which only the outer is left intact. Here may be seen a sculptured panel with two nimbed figures, apparently the Virgin and Child, under a canopy which seems to be supported by three pillars with stepped bases and capitals. There is no evidence of a central tower rising between the chapels, and therefore we are unable to say whether it was a case of a real or only of a pseudo-transept. The whole of the church was roofed with timber.

The artistic details of the church point to a single date and the hand of a single carver of low quality. For instance, the hood mould round the sanctuary arch (Fig. 578), resting on rude animal heads, is contemporary with a similar one in the wall separating the two halves of the porch, while the stepped supports of the canopy described above, and the piers of the two-light triangular-headed opening on the inner face of the west end (Fig. 579), are treated in precisely the same way.

The lofty western tower, which originally must have been still higher as the bell-chamber has disappeared, tells us that the church, for reasons already stated, cannot be earlier than the reign of Edward the Elder (901–925). But if it had been erected at that date, so much of it would not have survived as is the case, for then it must have passed unscathed through the struggles between the Anglo-Saxons and Danes which desolated Mercia up to 941; so that we are obliged to come down

Fig. 579.—Deerhurst Church. West end (Xth Century).

to the reign of Edgar (959–975), which saw a revival of religious zeal among the Anglo-Saxons now that they were freed from the pagan Danish yoke, in order to find a state of things favourable to its reconstruction.

On the other hand, it is known that the abbey was in existence in 1006, and we cannot suppose that Edward the Confessor rebuilt it before he impoverished it. Besides, the masonry of his time in Gloucestershire was very different, as the walls of the chapel of the Trinity at Deerhurst tell us.

Deerhurst Church contains the earliest English example of the hood mould of an arch springing from heads, a feature of which considerable use was made in the Lombardic style, but of Etruscan origin. Indeed, the Etruscans used projecting heads not only on the imposts and keystones of arches, but even inserted them in the spandrels of arches. Thus the "Porta dell' Arco" at Volterra (Fig. 580), which, though not in its original state, has not changed sensibly from its original appearance,[1] exhibits three heads in relief, one on the keystone of the arch, the others on the imposts. The gate known as the "Arco di Augusto" at Perugia has the remains of two heads in the spandrels, while the Porta Marzia (Fig. 581) displays the remains of heads of the Dioscuri in the spandrels, and another, thought to be that of a horse, on the keystone of the arch. At Faleri the "Porta di Giove" and the "Porta di Bove" have keystones carved with the heads of Jupiter and of a bull respectively.

Fig. 580.—Volterra. Porta dell' Arco.

Fig. 581.—Perugia. Arch of the Porta Marzia.

THE CHURCH OF ST. LAURENCE, BRADFORD-ON-AVON.—We learn from William of Malmesbury[2] that in his time there was standing at Bradford-on-Avon a small church said by tradition to have been built in honour of St. Laurence by Aldhelm, abbot of Malmesbury (680–705), Frome, and Bradford, and bishop of Sherborne (705–709). "Et est ad hunc diem eo loci ecclesiola, quam ad nomen beatissimi Laurentii fecisse predicatur." It is on this

[1] Martha, *L'art étrusque.*

[2] *Rolls Series—Gesta pontificum Anglorum.*

statement that the idea of so many writers, even some of the most recent,[1] is based, that the existing structure is the work of the sainted abbot and bishop. In my opinion, however, the account preserved by the historian was only a legend. And we are not the first to have doubts about the remote date assigned to St. Laurence, for they are shared by others.[2]

Fig. 582.—Bradford-on-Avon. Church of St. Laurence. Chancel arch (XIth Century).

The church, in spite of the injuries and mutilation which it has suffered, is still, as a whole (excepting the west front), such as it was designed by its architect. It consists of a rectangular nave with a chancel of the same form attached to it (Fig. 582). The exterior is decorated with lesenas, small clustered shafts, and blank arcading (Fig. 583). This ornamentation is by some thought to be a later addition, but any one who looks carefully at it will see at once this is not the case.

The most remarkable feature is the blank arcading. I have never come across any church in East or West, of Aldhelm's age or earlier, with this decorative treatment, continued, moreover, round the front and the chancel. Therefore we must conclude that Aldhelm, brought up at Canterbury in the School of Abbot Hadrian (669–708) ("qui esset fons litterarum, rivus artium"[3]), cannot have learned from a foreigner, of African origin but brought over from a convent of Campania, a new form of architectural decoration; and for the same reason he cannot have acquired it during his visit to Rome. Ranges of arches, either blank, or open and forming passages, were not employed in this extended form before the XIth century; and in England, judging from dated buildings, they do not make their appearance till after the Norman Conquest. It is inconceivable that Aldhelm should

Fig. 583.—Bradford-on-Avon. Church of St. Laurence. Chancel (XIth Century).

[1] Hodgkin, *The History of England from the earliest times to the Norman Conquest.*
[2] Baldwin Brown, *op. cit.*
[3] *Rolls Series—Willelmi Malm. gesta pontificum Anglorum.*

have introduced them on his church, and so freely too, at so remote a date, and that then the model should have remained for centuries a mere isolated phenomenon, ignored, never copied, and presenting a striking contrast to the appearance of other English churches. On the other hand, we cannot imagine that William of Malmesbury, who lived, roughly speaking, from 1095 to 1143, would have recorded the tradition about the antiquity of the church if it had only just been rebuilt in his time.

Another important point to be noticed is the double splay of the windows, a feature which, as we have remarked already, did not appear in England before the time of Dunstan.

I believe that the only period in which we can date St. Laurence is that of Edward the Confessor, under the influence of the artistic movement of the epoch of 1000, or, perhaps, with greater likelihood, the first years of the reign of the Conqueror, at a time when Saint Étienne at Caen (1066–1086) was being designed with its double encircling range of large blank arches and blank arcading of an elaborate nature. This would explain the mixture of Anglo-Saxon (the plan and the doorways) and Lombardo-Norman features (the blank arcading) in the church. Nor need we be surprised that, after an interval of more than half a century, William of Malmesbury should have recorded, in his "Gesta Pontificum Anglorum," finished in 1125, an erroneous tradition about its origin; for, as has been remarked,[1] fifty years do not pass, even in our own time, without the invention, even on the spot, and propagation of false ideas about the origin of buildings; and my own long and varied experience in such matters entirely confirms this opinion.

Fig. 584.—Escomb Church (XIth Century).

ST. JOHN'S CHURCH, ESCOMB (DURHAM).—Though we have no information about the origin of this church, we are not altogether ignorant of its history. We know, for instance, that "Ediscum," one of the possessions of St. Cuthbert, was alienated by force, with other lands and churches, from Bishop Aldhun (990–1019), but afterwards restored to him.[2] [3] [4]

It consists of a nave with rectangular chancel (Fig. 584). The lofty, narrow chancel arch, with long and short work in the jambs, should be noticed (Fig. 585). In the chancel is a slab carved in high relief with a rude cross ornamented with studs (Fig. 586), which recalls another on a gravestone in St. Andrew's, Auckland

[1] *Archaeological Journal*, 1898—Micklethwaite, *Some further notes on Saxon Churches.*
[2] *Rolls Series—Symeonis monachi hist. de S. Cuthberto.*
[3] *Rolls Series—Symeonis monachi hist. Eccl. Dunelm.*
[4] The Durham *Liber Vitae* (British Museum). *Publications of the Surtees Society*, Vol. XIII.

Fig. 585.—Escomb Church. Chancel arch (XIth Century).

(alienated, like Escomb, with other lands and churches belonging to St. Cuthbert from Aldhun [1] [2]), more elaborately treated, but of the same type, and ornamented with pellets in the upper corners of the field : a style of decoration of which there are but few examples in England.

Escomb Church is generally regarded as of great antiquity ; for instance, as belonging to the age of Benedict Biscop and Bede, or of about the year 800. We do not share these views, but believe it to have been erected after its restoration to Aldhun, and very probably after Canute had made his generous donation to St. Cuthbert ; for it does not seem possible that the original structure, probably of wood, like the cathedral at Chester-le-Street before 1042, can have survived, almost untouched, the dark days of the Danish invasions. We must also take account of the following reasons :—

(1) The earliest dated example of an English church with a rectangular chancel which can be certainly instanced is SS. Mary and Ethelburga at Lyminge (965). I believe that it was in the time of Dunstan that the plan came into fashion. Nor need we wonder that the square chancel, which was certainly not the plan favoured by the Roman Church, obtained a firm footing under Dunstan, if we remember the spirit of independence which distinguished him, and even carried him to the length of disobeying a Papal order.[3] Its adoption may have been due to reasons of expense. The builders of that age were obliged to choose straight walls, which were easy and simple of construction, in preference to curvilinear ones, which require specially prepared materials and a higher degree of skill. Or it may have been dictated by the small dimensions of some churches, which were too narrow to allow of the throwing out of an apse large enough to contain the altar and provide room for the free movement of the celebrant.

Fig. 586.—Escomb Church. Carving (Pre-Conquest).

(2) The feature of long and short work, which

[1] *Rolls Series—Symeonis monachi hist. de S. Cuthberto.* [2] *Rolls Series—Symeonis monachi hist. Eccl. Dunelm.*
[3] *Rolls Series—Memorials of St. Dunstan, arch. of Canterbury—Epistola Adelardi ad Elfegum arch. de vita S. Dunstani.*

we first noticed in St. Peter's, Monkwearmouth (675), does not prove, to judge by existing remains, that its use was general in England as a constructive or decorative device, or both combined, and introduced, either only in the windows, or at the angles of the building as well, before the reign of Edgar (959–975). It was a feature which, together with that of lesenas, appears to me to have reached its highest expression as a form of decoration at the end of the Anglo-Saxon period.

Fig. 587.—Norton Church (XIth Century).

ST. MARY'S CHURCH, NORTON (DURHAM).—The Durham "Book of Life" tells us that "Northtun" was given, or rather given back, to St. Cuthbert about the end of the Xth century. In 1083 the church was made collegiate, at the same time as Auckland and Darlington, in order to receive the canons ejected by Bishop William of St. Carilef from Durham.

Its plan was cruciform, with an aisleless nave and central tower (Figs. 587, 588). The nave has been rebuilt on the old lines, and the chancel reconstructed on a larger scale. The eastern and western arches of the crossing have been rebuilt, and those on the north and south have lost the innermost archivolt. The only portions of the original structure left are the transept walls, those on the north being almost intact, while the south arm has been altered in quite recent times. The tower is also original, though the upper part is no longer in its primitive state.

Fig. 588.—Norton Church (XIth Century).

This is the only early cruciform church with a central tower in Northumbria. This feature shows that it is later than Alfred the Great's (871–901) church at Athelney, and the church at Ramsey (969), that is to say, the two earliest examples in England; while the remaining square-headed window in the transept reminds one of Escomb. Lastly, the

outer archivolt of the tower arches recalls the chancel arch at Stow Church (about 1040), the plan and elevation of which suggest analogies with Norton.[1] We regard it as a reconstruction, like Escomb, following the donation of Canute; carried out, perhaps, in the days of Bishop Egelric of Durham (1042–1056), who rebuilt in stone the primitive wooden cathedral at Chester-le-Street.[2]

Fig. 589.—Bayeux Tapestry. Representation of Bosham Church (XIth Century).

BOSHAM CHURCH (SUSSEX) is represented, though only in a conventional way, on the Bayeux Tapestry, with Harold on the point of entering the door, followed by a travelling companion (Fig. 589). Originally it consisted of an aisleless nave with a tower at the west end (Fig. 590), and at the east a chancel which appears to have been of rectangular shape. The nave walls were afterwards cut through to admit of aisles, and the end of the chancel was pulled down in order to increase its length.

The most interesting feature in the church is the chancel arch (Fig. 591), with its half compound piers surmounted by rude continuous capitals of bulbous form, and a common abacus, from which spring multiplied archivolts. The rude bases are formed of rolls and hollow mouldings, and rest on a large roll moulding common to all the members, and the plinth.

Bosham Church must be rather earlier than Harold's visit to Normandy (about 1064), and had, perhaps, been recently erected, either by Godwin († 1053), the owner of Bosham, or by Harold himself, when he went there to pay his devotions.

Fig. 590.—Bosham Church. Tower (XIth Century).

[1] *The Reliquary*, January, 1894—Hodges, *Norton—St. Mary the Virgin's Church.*
[2] *The Reliquary*, April, 1894—Hodges, *Chester-le-Street—St. Mary and St. Cuthbert's Church.*

The developed art shown in the chancel arch, with the grouping of the shafts at the sides, and the way in which they correspond to the archivolts above, and also the character of the capitals and bases as compared with the original tower arch at Stow, fix the date of the church in the years after 1040, and during the reign of the Confessor.

To his reign may also be assigned the original portions of the nave and the square chancel attached to it of Wittering Church (Northants).

Fig. 591.—Bosham Church. Chancel arch (XIth Century).

* * *

With the evidence of the churches which we have just examined, and with the light shed by the proper comparisons, let us now see whether we can find our way among the obscurities of those which are quite undated, though they present features which have caused them to be assigned to the Anglo-Saxon period. It will appear, I think, that the meagre list of buildings of that age, which since the time of Rickman[1] has gone on growing to excessive dimensions, will have to be reduced.

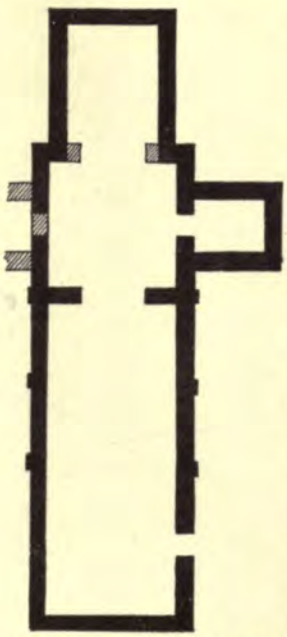


Fig. 592.—Breamore Church. Plan (Xth Century).

ST. MARY'S CHURCH, BREAMORE (HANTS), is of cruciform plan, with aisleless nave and rectangular chancel, but has lost the north arm of the transept (Fig. 592). The form of the quasi-transept, the arms of which are not open, but closed like two chapels, access being given by an arch in either case (Fig. 593), connects the church with those of Deerhurst, Worth, St. Mary's Dover, and Repton; while its poor and meagre artistic features, confined nowadays to the cable moulding on two impost courses, and the roughness of the masonry (Fig. 594), relieved neither by arcading nor lesenas, lead one to place it about the same date as the church at Lyminge (965), and before Repton.

Approximately contemporary with it will be the nave of Britford Church (Wilts), which has two arches in the side walls, probably giving access originally to two lateral chapels. The arch on the north side has the intrados ornamented by a band with plain sunk panels at intervals,

[1] *Studies of the Styles of English Architecture.*

while the jambs are made up with fragments of carving which may belong to any time between the VIIIth and Xth centuries (Fig. 595).

Fig. 593.—Breamore Church. Arch of south arm of transept (Xth Century).

Fig. 595.—Britford Church. Carving in north opening (VIIIth – Xth Centuries).

Fig. 594.—Breamore Church (Xth Century).

THE TOWER OF BARNACK CHURCH (NORTHANTS).—Of the original western tower (Fig. 596) only two stages are left. They are of stepped outline, separated by

a stringcourse, and striped vertically by rude narrow lesenas of varying dimensions. Some of the windows have round, others triangular heads. Two of them are filled with *transennae* of interlacing circles. The west window on the ground floor had, apparently, a projecting figure ("protome") above it, remains of which may be seen.

The door, on the south side, with a hood mould, recalls the original arches which carry the tower of St. Mary's, Norton. Above it is a window with two birds in the spandrels, facing one another, of barbarous design and execution; and at the top a circle with rudely represented flowers. Three carved slabs may be noticed built into the north, west, and south sides respectively of the upper stage. On each is represented a tree with branches of scroll work. The carving is in fairly high relief and shows some vigour, though of rude design. Above one of the pieces is a cock, and in another case a bird which is decayed beyond identification.

Fig. 596.—Barnack Church. Tower (XIth Century).

Fig. 597.—Barnack Church. Tower arch (XIth Century).

The tower of Barnack belongs to the same family as that of Earl's Barton, but is an elder sister, as is proved by its greater rudeness both in construction and decoration. It must have been erected after the Danish ravages in Northamptonshire in 1010, and very likely in the early years of Canute's reign (1014–1035 or 1036), and after the building of Repton Church, which, though it also shows decorative treatment with plain lesenas, has ruder masonry. And it will come before Stow (about 1040), for the tower arch (Fig. 597) is less developed than the surviving original one in that church.

ST. PETER'S CHURCH, BARTON-ON-HUMBER (LINCS), originally consisted of a square tower (Figs. 598, 599), the ground floor of which served

Fig. 598.—Barton-on-Humber. Tower of the church (XIth Century).

Fig. 600.—Rome. Santa Pudenziana. Campanile (XIIth or XIIIth Century).

as a nave, and east and west of this two projecting structures, the former, of rectangular shape, being the chancel. This has now disappeared, but remains of the foundations were discovered recently. In the tower, to which a stage has been added, the two-light openings of the original parts have mid-wall baluster shafts with pulvins. Those in the added stage which have not been rebuilt are divided by moulded shafts—a sort of combination of the shaft and the baluster, like those in the tower of Glentworth Church (Lincs)—and in one case by an ordinary shaft. The capitals (two with a crocket at each angle) are of Pre-Lombardic cubical type, with each face ornamented by a semicircle, and carry pulvins.

Apart from the singular plan of the church, we may notice two features, the baluster shafts and pulvins, and the arcaded decoration, as likely to throw some light on the date which, contrary to the prevailing opinion, has already been put in the last part of the Xth century.[1]

With regard to the moulded corbel pulvins, if we are to judge by buildings of certain or approximately certain date, this impost member did not make its appearance in England before the reign of the Confessor. And in their earliest form they consist simply of a flat upper face and a straight chamfer, which is exactly what we find at Barton-on-Humber. Later, they were given a hollow chamfer profile, and curl over at the ends, as at Sompting and Jarrow, or take other forms. If they occasionally appear as mere square-edged oblong blocks, as at Worth, this must be due to the incapacity of the

[1] Baldwin Brown, *op. cit.*

workman or the economy of his employer.

We may remark here that, though pulvins of Ravennate origin served as models or suggestions for the builders of other countries, corbel pulvins of elongated form and considerably flattened at the sides did not appear for the first time in the IXth century on the campanile of Santa Pudenziana at Rome (Fig. 600), as is believed ;[1] for the Lombardo-Roman bell-towers, derived as they were from those of Lombardy, the prototype being represented by San Satiro at Milan (876), did not appear in Rome till about the end of the XIth century, and the archetype is to be found in the little church of Santa Maria in Cappella ("Sancta Maria ad Pineam") (Fig. 601), dedicated in 1090, as may be read in the well-known inscription built into the inner face of the entrance wall. The campanile of Santa Pudenziana is an addition made in the time of Innocent III (1198–1216), who restored the church of Siricius (384–399).

Fig. 599.—Barton-on-Humber Church. East side of the tower (XIth Century).

Fig. 601.—Rome. Santa Maria in Cappella. Campanile (1090).

The triangular and round-headed arcading on the tower of Barton-on-Humber, recalls and must be an echo of that on the two western towers of the abbey church of Gernrode (Xth century). We have noticed similar arcading, alternating with a range of round arches, represented in one of the Cottonian MSS. (Claudius, B. IV) in the British Museum.

Hence, taking everything into account, and remembering, as we pointed out when discussing Repton Church, that the earliest appearance in England of the decorative use of lesenas was not before the time of Dunstan or the year 965 though it must come before 1034, and consider-

[1] Baldwin Brown, *op. cit.*

Fig. 602.—Bracebridge Church. Tower (XIIth Century).

its less barbarous and less irregular character. of building activity which marked the time of Robert, forms a very appropriate setting for the tower of St. Michael's, in spite of its display of Anglo-Saxon details—details which we know were perpetuated by English builders even after the Norman Conquest. For Robert, besides contributing to the reconstruction of Abingdon Abbey, erected at Oxford the Castle (1071), St. George's in the Castle (1074), a great bridge to the north of the city (1066–1087), and rebuilt some parish churches both within and without the walls.[2] [3]

To return to Barton-on-Humber, the addition to the height of the tower must have been made under Norman influence and after 1066, for it was only then that ing that the architectural decoration of the church shows an advance on that of Repton, we shall not be far wrong if we date Barton-on-Humber Church later than Repton, and, to be as exact as may be, in the first years of Edward's reign (1041 or 1042–1066).

The baluster shafts and rude pulvins in the tower carry one's thoughts to St. Michael's, Oxford, where the two-light openings in both stories have balusters surmounted by rude moulded pulvins. I believe with Freeman[1] that the tower was built by Robert d'Oily the Elder. And, indeed, the original masonry, external as well as internal, showing as it does long and short work at the angles, differs widely from the remains of Ethelred II's work in Oxford Cathedral (after 1004) by While, on the other hand, the era

Fig. 603.—Dover. St. Mary in the Castle (XIth Century).

[1] *Op. cit.*

[2] *Rolls Series—Chronicon monasterii de Abingdon.*

[3] *Rolls Series—Annales de Oseneia et chronicon Thomae Wykes.*

Corinthianesque crocket capitals, cubical crocket capitals, and cubical volute capitals were produced in England.

These capitals require a few words of explanation. The reappearance of the Corinthianesque capital with crocket leaves at the angles after the decadence of the Dark Ages is to be ascribed to the revival which took place about 1000, when it was introduced as a novelty in the crypt of Saint Pierre de la Couture at Le Mans (997). It was not seen again in England (supposing that the Romans had introduced this Etrusco-Roman type of capital) till after the Norman Conquest, and then for the first time in the chapel of Durham Castle (1072), that is to say, if we are to trust the evidence of existing and dated English buildings. The English cubical crocket capital and cubical volute capital (*i.e.* a cubical capital having at the angles either the simple head of a crocket leaf or a double volute) are merely simplifications and corruptions of the Corinthianesque crocket capital.

Fig. 604.—Worth Church (XIth Century).

Some comment is also demanded by the Lombardic cubico-spherical capital which made its first appearance in Sant' Abondio at Como (1013–1095), and also by the scalloped capital. Of the first there is no trace in England before the Norman Conquest: the crypt of St. Augustine's, Canterbury, affords the oldest dated examples. The second appears in its rudimentary form in St. Albans Cathedral (1077–1088), as we shall see presently.

If we make use of these two touchstones it will not be difficult to ascertain the true age of certain English churches, regarded as pre-Conquest, but which really, until the contrary is proved, must be held to belong to the post-Conquest period. Such are the following.

(1) The tower of St. Mary le Wigford, Lincoln, where the two-light windows have small Pre-Lombardic cubical capitals chamfered at the angles, and others of Corinthianesque form, recalling those in the smaller niches of the west front of the cathedral, surmounted by pulvins. Freeman [1] was right in assigning it, with the neighbouring church of St. Peter at Gowts, to the years between 1068 and 1086, and to the direction of the Conqueror's favourite, Colesvegen, who, having laid out the lower part of Lincoln across the Witham, was obliged to provide the new suburb with places of worship.

[1] *Op. cit.*

Fig. 605.—Worth Church. Chancel (XIth Century).

(2) The tower at the west end of Bracebridge church, near Lincoln (Fig. 602), having in its highest stage four tall two-light openings with mid-wall shafts (one of which is polygonal) bearing three scalloped capitals (ornamented with zigzags, stars, and studs) and corbel pulvins, and one volute capital. This structure is certainly later than St. Albans Cathedral, and not earlier than the close of the XIth century, when the scalloped capital appeared in its embellished and perfect form.

(3) The tower at the west end of Branston church (Lincs), the ground floor of which is decorated with blank arcading having scalloped capitals. For the date of these what we have just said holds good.

(4) The towers at the west ends of the churches of Clee and Scartho, near Grimsby, and that of Glentworth, in all of which the presence of the volute capital, sometimes with the addition of a row of rude leaves, betrays their Norman date. In connection with Glentworth, a comparison has been made[1] with a capital in the Castle church at Quedlinburg, which must be the one with volutes formed by the prolongation of the interlacing bands and with pine cones at the angles, of which we shall give an illustration when we come to deal with it. But the church at Quedlinburg is not contemporary with the Anglo-Saxon period: on the contrary it is the result of rebuilding after the great fire of 1070. It is interesting to find at Glentworth the characteristic shaft partaking of the characters both of column and baluster which we noticed at Barton-on-Humber, for it shows that this form of support

[1] Baldwin Brown, *op. cit.*

Fig. 606.—Earl's Barton Church. Tower (XIth Century).

(which, moreover, is rare) was employed in England later than the Anglo-Saxon era.

(5) The tower at the west end of Great Hale Church, near Sleaford, the Norman date of which is proved by the occurrence of volute and scalloped capitals.

Fig. 607.—Earl's Barton Church. Outer door in tower (XIth Century).

THE CHURCH OF ST. MARY IN THE CASTLE, DOVER, consists of a nave (Fig. 603) with a tower rising above its eastern extremity, from the sides of which two chapels project and give it a cruciform shape. To the east of this is a rectangular chancel. At the west end is a Roman lighthouse tower, which has suffered considerably.

This church is one of the most important Anglo-Saxon monuments that we possess. The fact of the central tower puts it later than Athelney (871–901), and the adaptation of the lighthouse as a western tower, the two being incorporated,[1] fixes the date as later than the erection of Ramsey Abbey Church (969–974), where this adjunct first appeared in England. Our choice, then, having to be made in the period between 969–974 and 1066, we decide for the time of Harold, who built a new castle at Dover.[2] In any case, it is certain that the church belongs to the Anglo-Saxon period, for while it exhibits the characteristic features of that period, *e.g.* the aisleless nave with a tower, a square chancel, the quasi-transept forming chapels, and a tower at the west end, it does not present a single Norman one. The large windows and plain brick arches may be due to imitation of openings in the Roman building from which the bricks were taken.

Fig. 608.—Wing Church (XIth Century).

WORTH CHURCH (SUSSEX) forms a perfect Latin cross, with aisleless nave and a deep chancel, at the side of which rises a later bell-tower (Figs. 604, 605). The form of the piers of the chancel arch connects it with Bosham, and the moulding of the impost course of the arch reveals Norman influence, which

[1] *The Archaeological Journal*, 1896—Micklethwaite, *Something about Saxon church building.*

[2] Freeman, *op. cit.*

appears again in the broad lesenas on the exterior. The date must therefore be placed in the first years of the Conqueror's reign, or at earliest at the very end

Fig. 609.—Wing Church (XIth Century).

of the Confessor's, at a time when Westminster Abbey was in existence to suggest new ideas. Other writers have also suggested the XIth century.[1]

Fig. 610.—Sompting Church. Tower (XIIth Century).

THE TOWER OF EARL'S BARTON CHURCH (NORTHANTS) was the tower at the west end of a church which has been replaced by the existing one. It is still in its original condition, except for the embattled parapet (Figs. 606, 607).

Apart from the good masonry, everything about it is of rude character, from the lesenas, unequal both in size and distribution, and the irregular blank arch courses and round heads of the windows, to the roughly worked and squat balusters and the clumsily carved crosses. The architectural decoration is, however, so varied, and shows such an effort after originality, though of a rather childish character, that it is effective.

Earl's Barton tower was the highest expression of an infantile art, doomed to disappear before the Lombardo-

[1] Simpson, *A History of Architectural Development.*

Norman style. It may be called the swan's song of Anglo-Saxon architecture, in which some architect of the race combined in a sort of ill-ordered epitome all its leading characteristics, in order to form a kind of record for posterity.

For there can be no doubt that it is to the end of the Anglo-Saxon or the dawn of the Norman epoch that the tower must be assigned, as it is somewhat later than the one at Barnack, which must have been its model, and displays an amount of architectural decoration, though of a quite different character, which is only equalled by that on St. Laurence at Bradford-on-Avon, with which it must be contemporary.

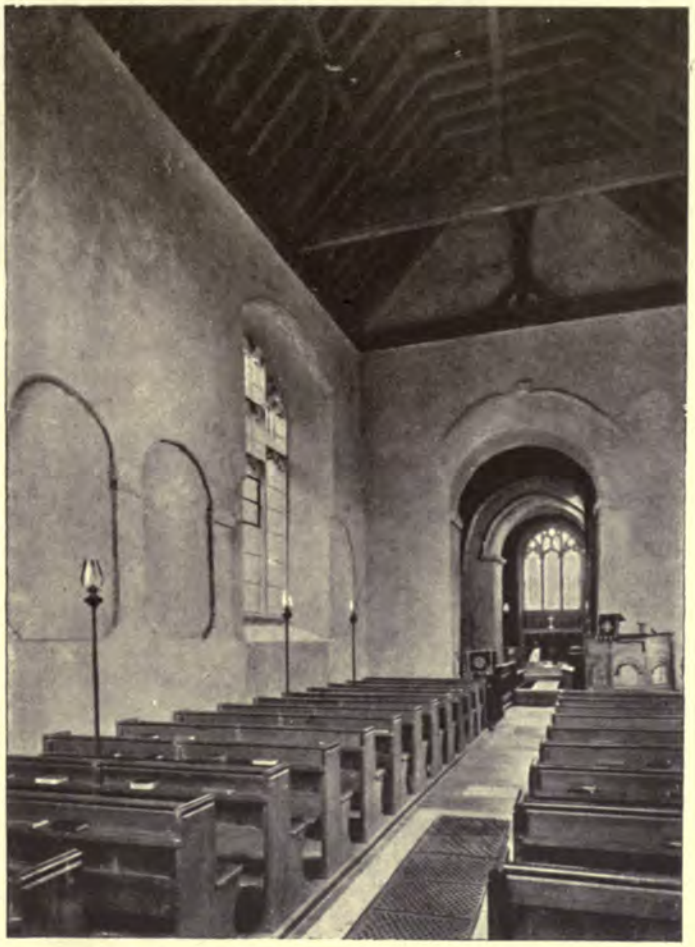


Fig. 611.—Great Dunham Church (XIth Century).

WING CHURCH (BUCKS) consists of a nave with aisles, the former terminated by a polygonal chancel (Fig. 608), below which is a crypt in the form of an ambulatory, added later. The Pre-Lombardic capital in the two-light opening above the chancel arch, surmounting, not a baluster as at Brixworth, but a shaft as at Kirkdale (1055–1065), brings it into relation with the latter. The refinement of the supports of the arcading round the apse (Fig. 609), which take the form of rolls instead of lesenas, points to the post-Saxon period and to Norman influence, which is further indicated by the two tiers of windows in the apse, and also by the basilica plan of the church. We know that, apart from a few of unusual importance, English churches of the Xth century and of the XIth before 1066 (and Wing must belong to one or the other) had only aisleless naves and, possibly, a tower at the west end or over the crossing.

The only Anglo-Saxon feature of the church is the triangular headed arcading; and therefore, on the whole, we are inclined to assign it, not so much to the last years of the Confessor's reign, as to the time of the Conqueror.

The vertical rolls on the apse recall those on the tower of Sompting Church (Sussex), the roof of which was altered in 1727[1] (Fig. 610). Here each face is bisected by a roll carried up to the highest point of the gable, and cut horizontally by a

[1] Bloxam, *The Principles of Gothic Ecclesiastical Architecture.*

Fig. 612.—Great Dunham Church. Tower (XIth Century).

stringcourse with roughly moulded billets; while the windows consist of single or two-light openings, with round or triangular heads, and rude corbel pulvins, crutch-shaped, hollow chamfered, and curled at the ends. The prototype of this kind of pulvin is to be found at Mettlach (987).

Nevertheless, Sompting tower does not belong to the Anglo-Saxon age, as is generally believed. Against that view are the semi-cylindrical form of the lesenas and the course of billets—a Norman idea. It is further opposed by the arch inside, springing from half-piers consisting of square-edged members and a half-column corresponding to the similar members and roll moulding of the archivolts; while the continuous capitals show two coarse turn-over leaves and cauliculi with berries. This arch, with its rational disposition of the supports, and the carving on the capitals, is separated by a considerable interval of time from those at Stow, Bosham, and Barnack, and by some interval from the one at Langford. All this suggests that the tower was built in the early part of the XIIth century, in spite of the triangular-headed windows, which, after all, only show that English craftsmen had not yet got rid of their traditional "impedimenta."

The piece of carving inside the church, with the Saviour in the act of blessing, which is generally thought to be pre-Conquest, must be assigned to a period not earlier than the XIIIth century, on account of the form of the "vesica piscis" containing the figure of the Redeemer, and also the drapery of the figure.

The chief interest of the tower is in the gable heads which determine the form of the roof. It was a type of German origin, which made its appearance with the Lombardo-Rhenish style, so that the oldest examples are not earlier than the XIIth century. Its nationality is proved by the fact that, while it had a relatively wide vogue in

Fig. 613.—Cambridge. Tower of St. Benet's Church (XIth Century).

Germany, it only made rare and isolated appearances in other countries. Sompting is an instance of its sporadic employment, due to foreign importation. If it were not so we should not find among English buildings of the XIIth and XIIIth centuries, like an oasis in the desert, a solitary specimen of the "helmed tower," viz. the one at Sompting.

GREAT DUNHAM CHURCH (NORFOLK) has an aisleless nave with a tower at its eastern end (Figs. 611, 612), beyond which was the chancel, rebuilt in later times. The sides of the nave are decorated internally with rough blank arcading, the supports being crowned by an abacus carved with stars, lozenges, and indentations. On the impost blocks of the arch (which has a hood mould) opening into the tower (original except the battlements) stars are carved in low relief, a motive of Romano-British tradition. Instances of the decorative use of stars, either singly or in groups, in carving have come to light in excavations on the Roman Wall.[1] The west door has a triangular head and two jambs ornamented with billets.

Fig. 614.—Cambridge. St. Benet's Church. Tower arch (XIth Century).

Fig. 615.—Langford Church. Tower arches (XIth Century).

Great Dunham church is a compound of Anglo-Saxon and Norman work. To the Saxon tradition belong the disposition of the corner stones, and the form of the west door; while the enrichment of the interior walls of the nave with blank arcading is due to Norman influence, for there is no dated record of such decorative treatment applied to the inside of an English building before the Conquest. To the same source are due the indented and billet mouldings. Moreover, the two-light openings of the

[1] *The Builder*, June 11, 1898.

tower, the elongated form of the shafts, the Pre-Lombardic cubical capitals each with its abacus and pulvin, and the bases consisting of two rolls (one of bulbous outline) separated by a hollow chamfer resting on a plinth, all point to the English craftsmen having been brought into contact with the work of their Continental brethren.

Fig. 616.—Langford Church. Tower (XIth Century).

For these reasons the church cannot be assigned to the Anglo-Saxon period. Its place is in the first years after the Norman Conquest, while the two-light windows may even be the result of an alteration carried out rather later, in the last quarter of the XIth century. No weight need be given to the fact that there is a triangular-headed doorway, for this form continued to be used after the Conquest. An instance occurs in the tower of Jarrow, erected between 1074 and 1083.

The tower of Great Dunham with its rounded openings above the two-light windows recalls that of St. Benet's, Cambridge (Fig. 613), which we should assign to a post-Conquest date (in spite of the long and short work at the angles), that is to say, to the time when the new town of Cambridge was rising in the reign of the Conqueror. The lions, for instance, from which spring the outer archivolts of its internal arch (Fig. 614), point to Lombardic influence and a date which is not Anglo-Saxon. For, though as early as the first half of the XIth century the Lombard gilds made use of animals flanking doorways to serve as supports, as we saw in San Flaviano at Montefiascone (1032), the English craftsmen before the Conquest only employed for this purpose heads projecting from the wall, as we learn from the example of Deerhurst church (Xth century).

Fig. 617.—Langford Church. Crucifix (XIth Century).

THE TOWER OF ST. MATTHEW'S CHURCH, LANGFORD (OXON), rests on two arches, that looking towards the nave having piers and two archivolts springing from an impost course, while the one on the chancel side has half-piers and archivolts

with a roll moulding (Fig. 615). It is lighted by single, double-splayed windows, and by pairs of openings outlined by sunk rolls with foliated capitals at the imposts (Fig. 616). It has been thought to go back to the Anglo-Saxon age: perhaps to the early years of the XIth century, or more probably to the reign of the Confessor.

Fig. 618.—Romsey Church. Crucifix (XIIth Century).

We cannot accept this view. The arch, with its roll moulding, while recalling that at Bosham (which itself is subsequent to the Anglo-Saxon arch at Stow), is shown to be later by the more intelligent way in which the supports correspond to the archivolts, and by the more advanced art displayed in the carving of the continuous capitals. From another point of view, the well-executed foliage on the capitals of the two-light openings is decisive against an Anglo-Saxon date. We know what sort of capitals were produced by English chisels or axes. Nor is a pre-Conquest date indicated by the "keyhole" windows, for there is no dated example of that period to point to. Moreover, the external facing, with the returned lesenas at the angles ending in flat imposts, has an air of finish which is not Anglo-Saxon.

Langford tower must be put in the last quarter of the XIth century, at a time when, under Norman influence, English carvers were beginning to produce foliated capitals. To the same date is to be assigned the headless crucifix now built into the outer wall of the south porch, a figure of such rude character that, with its drapery, it might be made of wood (Fig. 617). Some writers have compared it to the crucifix at Romsey (Fig. 618). But this piece of sculpture, with its figure of the Redeemer, so much advanced beyond the figure capitals in the choir executed in the first half of the XIIth century, cannot possibly be earlier than the end of that century.

CHAPTER IV

THE LOMBARDO-NORMAN STYLE IN ENGLAND

WHEN the works of Saint Étienne at Caen were begun, Lanfranc was obliged to leave the scene of his achievements at Bec, and resign the prior's place to his pupil, Anselm of Aosta (1060–1066), in order to become abbot of the new monastery. The change was brought about by Duke William (1035–1066), anxious to have near him, in his favourite city, a trusty counsellor, capable of making clear and easy his way to the conquest of the crown which on the death of Edward the Confessor had passed to Harold. That conquest was the common work of these two great men. Normandy was too small for the lion's grasp of the one, and the eagle's flight of the other.

Although it was the sword of the valiant, fearless warrior, William of Normandy, which, on the field of Hastings (1066), decided the fate of England, winning for him the title of Conqueror, and placing the long-coveted diadem on his head, nevertheless it was the mind of Lanfranc, the soul and spring of the whole enterprise, that moulded his conception of the invasion and conquest, correcting, supplementing, bringing it to perfection. In all this he received invaluable aid from the Benedictine monks and secular clergy of Normandy, and also the support of his pupil, Pope Alexander II (1061–1073), and of Hildebrand, afterwards Gregory VII (1073–1086). And after he became archbishop of Canterbury (1070–1089) he performed a work of the highest importance in organising and consolidating the conquered country.

It was with Lanfranc, too, that the golden age of Lombardo-Norman architecture opened in England. And he was scarcely dead when William of St. Carilef began the building of his great church at Durham, which was to mark the passing of the Lombardo-Norman forms into those of the Transition, and so lead the way to the Pointed style.

Lanfranc, uniting in himself the architect, the man of letters, the diplomat, the statesman, was, it appears to me, the most important figure in the ecclesiastical world of the XIth century, with the exception of Hildebrand, who, however, was inferior to him in the perfect balance of his faculties. Placed at the summit of the hierarchical edifice, Gregory VII embraced in his view at once the vast horizon of the Catholic Church and the kingdoms of this world, in which he was the principal factor. But he did not know how to select the best ways and the most suitable means for carrying out his boundless designs. His insatiable ambition and ill-concealed restlessness were serious obstacles to his success; so that, if Lanfranc had not possessed the will and the skill to undo the mischief caused by the pontiff's lack of patience in dealing with William, the cry for separation from Rome would not have had to wait till the XVIth

century before it was raised. The triumph of Canossa would not have been repeated in the case of the Norman lion : the Conqueror was formed in a very different mould from the Emperor Henry IV. The last words said to have been uttered by Hildebrand—"Dilexi iustitiam et odivi iniquitatem, propterea morior in exilio"—words which are preserved in the "Officium proprium Sancti Gregorii papae. VII" of the Cathedral of Salerno, sum up the whole of his work. It is the confession of a man who has been beaten in the struggle against adverse fate.

THE ABBEY CHURCH OF ST. AUGUSTINE, CANTERBURY.—Recent excavations have revealed the scanty remains of the crypt of the church begun by the Norman abbot, Scotlandus (1070–1087), after demolishing the new work of Wulfric (1047–1059), and finished in 1091 by his successor Vido (1087–1099).[1] [2] [3]

The body of the church was arcaded, and terminated in a semicircle surrounded by an ambulatory with three radiating chapels.[4] The arches of the body of the church were supported by piers, and the nave was separated from the aisles by columns. The ambulatory had cross vaulting with visible arches.

To judge by what I saw in 1903, the capitals of the supports were of the Lombardic cubical type ; and among the bases were some of bulbous form in the Anglo-Saxon style, consisting of a plinth and a thick roll with a smaller roll above it. Such bases indicate that English craftsmen were employed in the works. When the first buildings in the Lombardo-Norman style were erected, the same thing must have happened in England which had taken place previously in Normandy in the days of William of Volpiano, as we explained in our account of the church at Bernay ; that is to say, Anglo-Saxon workmen were put under the direction of Norman workmen, who also undertook the more difficult tasks, such as the cross vaulting. The artistic parts, *e.g.* the capitals, bases, stringcourses, cornices, were generally left to English hands, and this explains the poverty of the results.

As the plan of the crypt must have been repeated in the choir above, St. Augustine's affords the earliest certain instance in England of a choir ambulatory with radiating chapels. For though we know that Westminster Abbey had an apsidal choir with surrounding aisle in the time of Edward the Confessor, it does not follow that it had a system of radial chapels.

Related to this crypt is the one at Gloucester, as constructed by Serlo (1089).

Among the remains of the church at Canterbury, the presence of the Lombardic type of cubical capital should be noticed, for this is the earliest dated English building in which it occurs.

CANTERBURY CATHEDRAL.—The primitive church of Augustine, restored and increased in height by Odo (942–959),[5] [6] and repaired by Canute after the Danes in 1011 had set fire to the roof,[7] was finally burned in the year 1067. Within seven years (1070–1077) Archbishop Lanfranc rebuilt the cathedral.[8] Under his successor Anselm (1096–1109), about the year 1096, Prior Ernulf, who had passed with

[1] *Rolls Series*—Elmham, *Historia monasterii S. Augustini Cantuariensis.*
[2] Mabillon, *Annales Ord. S. Benedicti.* [3] Twysden, *op. cit.*—*Chronologia Augustinensis Cant.*
[4] Routledge, *Excavations at St. Austin's Abbey, Canterbury—The Church of SS. Peter and Paul.*
[5] *Rolls Series—The Historians of the Church of York and its Archbishops—Vita Oswaldi arch. Eboracensis.*
[6] Wharton, *op. cit.*—Osborne, *Vita Odonis archiep. Cantuariensis.*
[7] Wharton, *op. cit.*—*Vita S. Elphegi archiep. Cant.*
[8] *Rolls Series—Eadmeri historia novorum in Anglia.*

Lanfranc from Bec to Caen, and had thence been summoned to Christ Church, Canterbury, demolished the eastern limb of the cathedral and began its reconstruction. It was completed by Prior Conrad, who gave his name to the choir, and the dedication followed in 1130.

In 1174 Conrad's choir, which had a painted wooden roof, was destroyed by fire. It was rebuilt between 1175 and 1184 by the architects William of Sens, and William "English by nation," who extended its length towards the east, incorporated part of the outer walls of the preceding church in the new work (as may readily be seen from Fig. 619), and kept untouched only the crypt with its two lateral chapels. In the XIVth century the nave and transept were rebuilt on the old lines, and in the XVth the great central tower was erected.

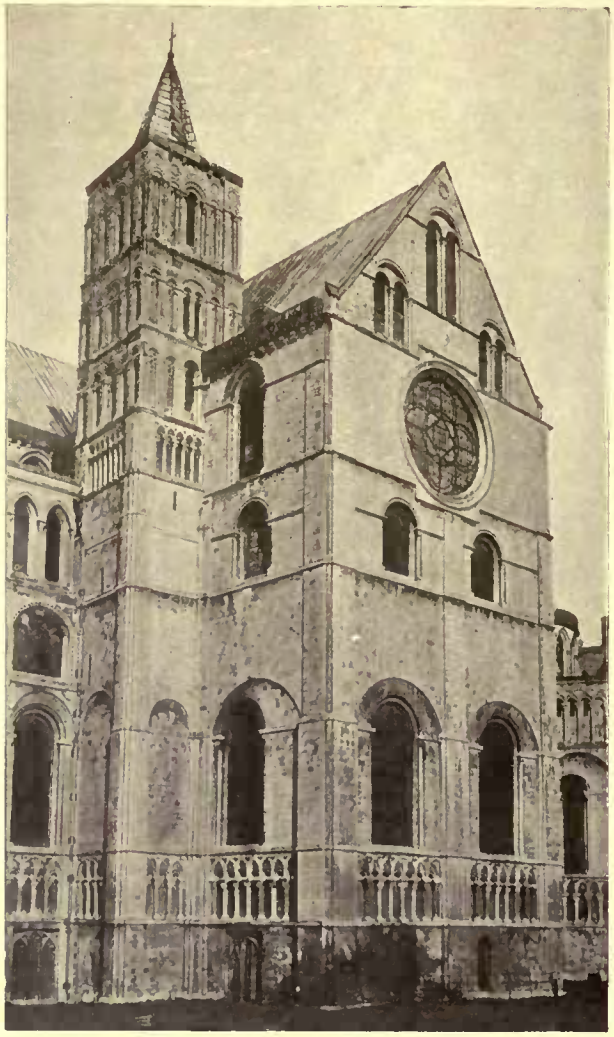


Fig. 619.—Canterbury Cathedral. South side (XIth and XIIth Centuries).

Gervase[1] tells us that Lanfranc's church was of cruciform plan with a central tower. The arches of the nave were carried on piers, and there were two lofty towers at its western end. Each arm of the transept had a vaulted gallery or loggia, supported on three sides by the outer walls, and on the fourth by a pier. The choir was raised by several steps above the level of the rest of the church, and two flights of stairs led down to the crypt. The form of the choir and crypt is unknown, for Gervase did not see them, and was not acquainted with any description. But his account of the church, brief and imperfect as it is, makes it clear that Lanfranc's design was taken from his Saint Étienne at Caen.

Conrad's choir, we learn from Gervase, with Ernulf's new crypt beneath it, was of considerable length, with an apsidal end. It had arcades at the sides, with a triforium above them, and was provided with a secondary transept. Christ Church, Canterbury, is thus the first instance in England of a double transept. At the sides of the choir were two lofty towers, known as St. Andrew's and St. Anselm's, and at its extremity was a square chapel. This adjunct, and the similar one at Rochester, were the first "Lady Chapels" in England.

[1] *Rolls Series—Gervasii Cantuariensis opera historica.*

A drawing made by the monk Edwin gives a view of the exterior of the new choir and the remains of Lanfranc's church.

Ernulf's crypt has come down to us almost untouched, and merely broken

Fig. 620.—Canterbury Cathedral. Crypt. Chapel of St. John or St. Gabriel (XIth and XIIth Centuries).

into at its junction with the other part of the crypt belonging to the late XIIth century structure. Several of its Lombardic cubical capitals, as well as of those in the two lateral chapels (Figs. 620, 621), were carved and ornamented in various ways in the course of the works carried out after the disaster of 1174. This may be inferred from the fact that the capitals in Conrad's and Ernulf's building were left plain—"in capitellis veteribus opus erat planum, in novis sculptura subtilis," as Gervase says; and also from the advanced stage of art displayed by the carvings, which suits the period we have suggested.

Fig. 621.—Canterbury Cathedral. Crypt. Capital in Chapel of St. John or St. Gabriel (XIth and XIIth Centuries).

Before leaving the subject I may remark that Edwin's view of the church is of the same date as the other illuminations in the Canterbury Psalter,[1] that is to say, of the XIIth and not the Xth century. This fact has not been previously observed, and it reduces the age of the Psalter, which has hitherto been studied only from the palaeographical and not from the architectural point of view, or by anyone who was familiar with mediaeval buildings. The Psalter contains numerous representations of structures

[1] *Tripartitum Psalterium Eadwini* in the Library of Trinity College, Cambridge.

which indicate a date later than the Norman Conquest. We will only cite the instance of a basilica with a central cupola decorated with two tiers of blank arcading separated by a band with lesenas at intervals. Now, it is known that, in England, lantern towers were not embellished with such arcading before Lanfranc's rebuilding of his cathedral, and that is why the central tower of Westminster Abbey was devoid of it, as shown by the Bayeux Tapestry. There is also another view of a

Fig. 622.—Durham. Chapel in the Castle (1072).

church with arcading of a refined type running below the line of the aisle roof, a feature which appears on no dated English building earlier than the Conquest.

THE CHAPEL OF DURHAM CASTLE.—Durham Castle was begun in 1072, and the fruitless siege by the murderers of the unfortunate Bishop Walcher (1071–1080) shows that it had been finished before 1080. The fact that the canons of Waltham, whose church and lands had been given to the see of Durham by the Conqueror (1075), contributed in the days of Rannulf Flambard an annual

payment towards the building of the castle, as we learn from the exemption which Queen Matilda obtained for them, only means that their subsidy went towards the important works executed by that energetic and restless prelate to increase the strength of both castle and city.

Fig. 623.—Durham. Chapel in the Castle. Capital (1072).

The castle chapel is the one described by the monk Laurence, afterwards prior of Durham (1149–1154) as "non spatiosa nimis, sed speciosa satis."[1][2][3] It is of rectangular form, divided into three aisles with unraised cross vaulting (Fig. 622). The carving on the capitals of the columns is executed without undercutting, and the decorative elements are sometimes well treated; but the representations of living creatures are clumsy in design, and rude in execution (Figs. 623, 624, 625). The chisels were, generally speaking, Norman, as is shown by the introduction of their characteristic crocket capital. One of the earliest instances in the North of England of this type is to be found in the crypt of Lastingham church, rebuilt about 1078.[4]

Fig. 624.—Durham. Chapel in the Castle. Capital (1072).

The Corinthianesque crocket capital, which has been wrongly described by some writers as Byzantine, is of remote origin. In the tomb of the Volumnii near Perugia is a marble cinerary urn in the form of a temple, believed to be of the age of Augustus, in which the capitals of the pilasters have crocket leaves at the angles instead of volutes (Fig. 626). Earlier still, leaves of this kind were used on the capitals of the "Tomb of the Reliefs" at

Fig. 625.—Durham. Chapel in the Castle. Capital (1072).

[1] *Rolls Series—Symeonis monachi hist. Regum.*

[2] *Rolls Series—Symeonis monachi hist. Eccl. Dunelm. continuatio.*

[3] *Publications of the Surtees Society—Dialogi Laurentii Dunelmensis monachi ac prioris.*

[4] Dugdale, *op. cit.*

Fig. 626.—Perugia. Tomb of the Volumnii. Cinerary urn (B.C. 29–A.D. 14).

Cerveteri, and on those of a terracotta urn in the Museum at Perugia, dated respectively about the IVth century, and the IInd or IIIrd century B.C.

English carvers worked on the chapel at Durham as well as Norman ones, and this explains the low grade of art displayed by some of the results. I should, for instance, assign to Northumbrian artists the capitals with a grotesque human head, a siren, a stag, and a horse, all of which present various mutual analogies, while they are quite different from others of the living creatures represented, such as the strange animal head with protruding tongue, and the human figures holding up the abacus.

Anyone who compares the foliage of the best of these capitals with that in the cathedral on the capitals of the interior door near the south arm of the transept, and on the four capitals of the blank arcading in the nave aisles, will be at once struck by the inferiority of the artists who produced the foliated capitals in the cathedral. Noting this fact, and considering that the cubico-spherical is the prevailing type in the great church, we shall be safe in excluding any Norman artists from it, whether monastic or lay.

The masonry of the chapel may also be set down to Norman builders, as is shown by the cross vaulting. English masons were not yet capable of carrying out such work.

Fig. 627.—St. Albans Cathedral. Nave (1077–1088).

ST. ALBANS CATHEDRAL, founded as an abbey church in 793 by Offa, king of Mercia (755–794 or 796), was rebuilt between 1077 and 1088 (with help from the primate Lanfranc) by Abbot Paul (1077–1093), who had formerly been a monk of Saint Étienne at Caen.[1][2] Eadmer

[1] *Rolls Series*—Walsingham, *Gesta abbatum monasterii S. Albani.*

[2] *Rolls Series—Matthaei Parisiensis hist. Anglorum.*

and Ralph de Diceto say that it was Lanfranc himself who carried out the rebuilding.[1] [2]

Abbot John de Cella (1195–1214) pulled down the west front in order to make a new one. The work on the new front was continued by his successor, William of Trumpington (1214–1235), who altered the aisle windows in the new style and remodelled the top of the central tower. Abbot George of Hertford took in hand the reconstruction of the choir which, with its Lady Chapel, was completed in 1326 by Abbot Hugh of Eversden (1308–1326). In 1323 two of the piers on the south side of the nave collapsed, and five arches of the arcade had to be rebuilt. John of Wheathamstead (1420–1440, 1451–1464) made extensive changes. The restorations of recent years have to a considerable extent altered the original features of the church.

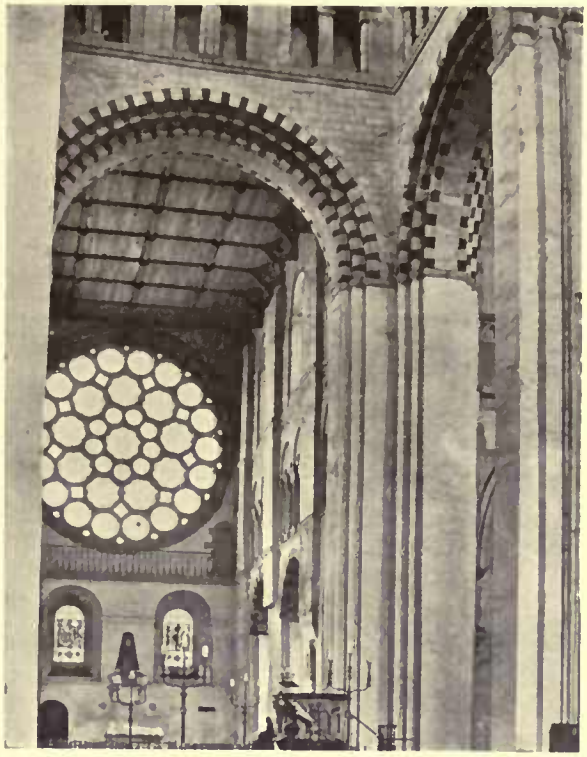


Fig. 628.—St. Albans Cathedral. North arm of transept (1077–1088).

Of the Norman structure there survive, in a more or less altered state, the transept and central tower, the junction between this and the choir, and the body of the nave except the west front.

The nave (Fig. 627) and transept (Fig. 628) retain their wooden ceilings. The aisles, to judge by what is left of the old choir, were originally covered with rude unraised cross vaulting.

In the transept may be noticed some baluster shafts which have been used over again. They have various mouldings, and are turned on the lathe. Possibly they were made in the second half of the Xth century, in the days of Abbot Eadmer, who cherished a design of rebuilding the church.[3] We may also observe some Lombardic cubical capitals with two half-rounds on each face.

Though the design for St. Albans issued from the School of Lanfranc, English craftsmen and workmen were employed in its erection. The masonry (Fig. 629), except for a larger use of bricks, is just like that of the neighbouring St. Michael's (about 950). The design of the piers, consisting of mere rectangular supports without engaged shafts, and finished off by simple imposts instead of capitals, was, with its bare, montonous simplicity, perfectly in keeping with the scanty skill of the Anglo-Saxon craftsmen and builders employed in the work. The inferior quality of these workmen is further betrayed by the poor character of the mouldings throughout the church, and the entire absence of carving. Moreover, the presence of English hands is indisputably proved by the use made in the transept of the characteristic baluster

[1] *Rolls Series—Historia novorum in Anglia.*
[2] *Rolls Series—Opera historica.*
[3] *Rolls Series*—Walsingham, *op. cit.*

shafts which, being of irregular size, were made to fit their places by the addition of clumsy bases of Anglo-Saxon character ; and their almost total unfamiliarity with the use of the chisel is shown by the fact that the cubical capitals and the shafts have been hewn with the axe.

St. Albans Cathedral affords only one feature of importance : the cubical capitals with two half-rounds on each face ; the earliest specimens of the sort, of certain date, that I can point to, and the representatives of the new Anglo-Lombardic type of

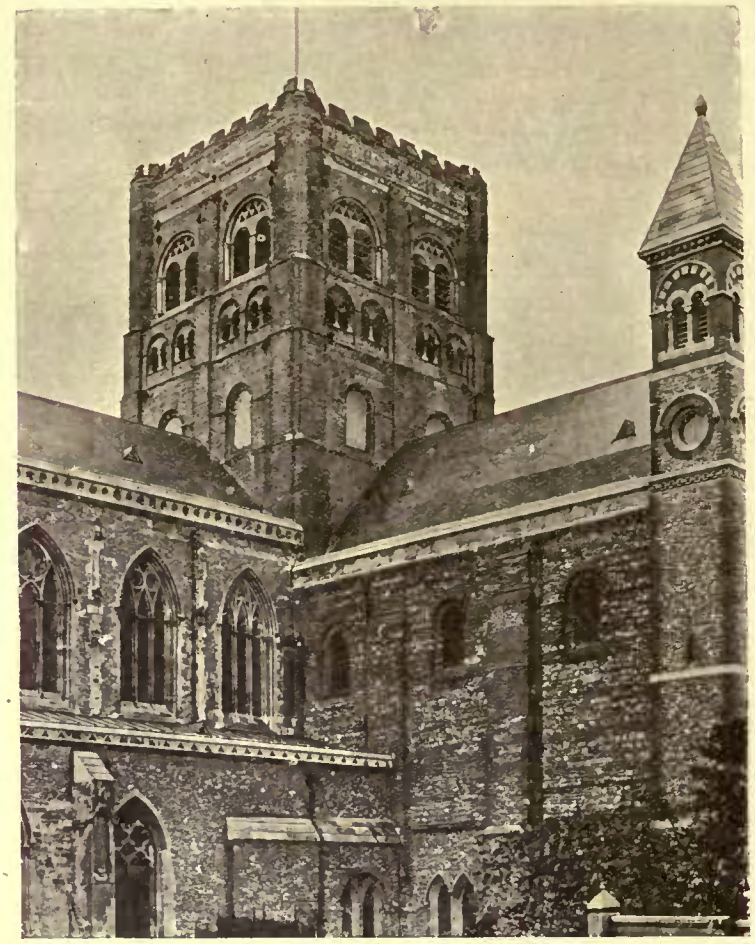


Fig. 629.—St. Albans Cathedral (1077–1088).

cubical capital which, with some further embellishment, became the scalloped capital so largely employed by the English builders.

LINCOLN CATHEDRAL was founded in honour of the Virgin by Remigius, originally a monk of Fécamp, and afterwards bishop of Dorchester and Lincoln (1067–1092),[1] to replace an earlier church dedicated to St. Mary Magdalen. The foundation must have taken place when he transferred the see to Lincoln, that is to say, after his return

[1] *Rolls Series—Willelmi Malmesbiriensis monachi gesta pontificum Anglorum.*

from Rome (where, through the intercession of Lanfranc, Pope Alexander II had restored to him the pastoral staff and ring), and after the transfer had been decreed by the council held at Windsor in 1072.[1] We know that the building was finished in 1091,[2] and in 1092 it was dedicated.

Damaged by fire about 1141, the cathedral was brought up to date, and vaulted (' . . . . egregie reparando lapideis fideliter voltis primus involvit ") by the Norman

Fig. 630.—Lincoln Cathedral (XIIth and XIIIth Centuries).

bishop, Alexander (1123–1148).[3] The semi-elliptical outline remaining at the west end of the nave shows the kind of roof constructed. The terrible earthquake of 1185 rent

[1] *Rolls Series— Willelmi Malm. monachi gesta regum Anglorum.*
[2] *Rolls Series—Matthaei Parisiensis monachi S. Albani chronica maiora.*
[3] *Rolls Series—Giraldi Cambrensis opera—Vita S. Remigii.*

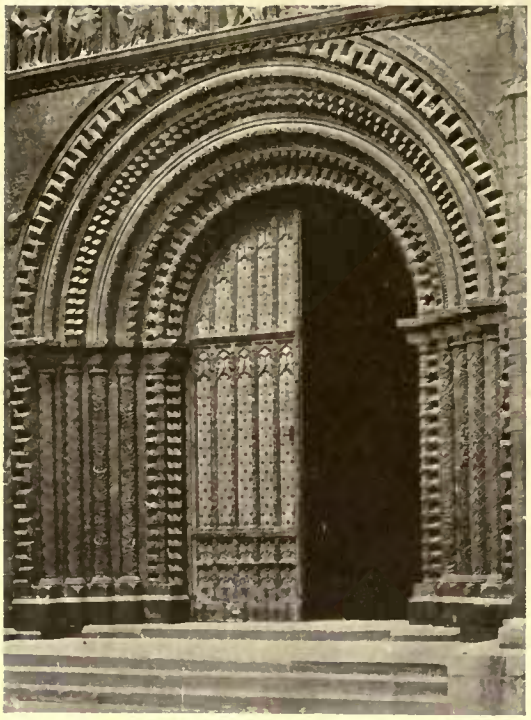


Fig. 631.—Lincoln Cathedral. Central portal of west front (XIIth Century).

adding a new facing to that built by Remigius, in order to enable the great recesses with their portals, and the two apsidal niches, to be formed within it. It is this which explains the fact that the towers, which originally formed part of the façade, no longer stand on the front line but behind it.

Before the XIIth century there was nowhere to be seen, not merely in England, but in no country of Europe, a portal with such deeply recessed and elaborate mouldings as the central one at Lincoln (Fig. 631), nor did blank intersecting arcading appear in England before the building from top to bottom,[1] and bishop Hugh of Avalon (1186–1200), who had been prior of Witham, took in hand its reconstruction in the Pointed style with Geoffrey de Noiers for his architect.[2] Of the two previous structures were retained: part of the west front with the two great towers, afterwards raised by the addition of a very lofty stage in the new style; the westernmost bay of the nave, with some alteration, repeated on a later occasion; and the walls of the aisles reduced to the form that they present to-day.

In the west front (Fig. 630) the work earlier than Hugh's time at once strikes the eye. It consists of the central portion, with two semicircular niches, three great recesses, and three doorways, and reaches as high as the two ranges of intersecting arcading above. It is the result of Bishop Alexander's alterations, which gave an exceptional thickness to the wall by

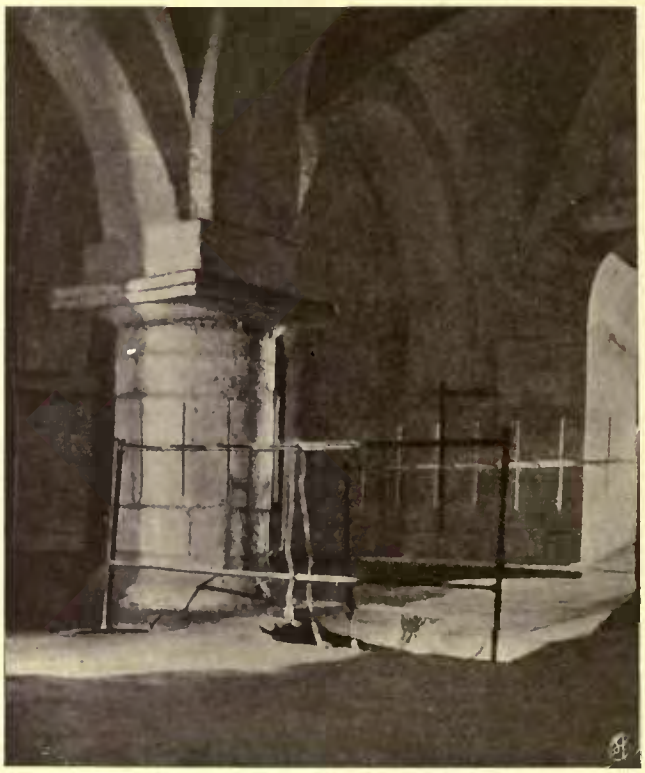


Fig. 632.—Winchester Cathedral. Part of the Old Crypt (1079–1093).

[1] *Rolls Series—Chronica magistri Rogeri de Houedene.*

[2] *Rolls Series — Magna vita s. Hugonis episcopi Lincolniensis.*

the end of the XIth century. Moreover, it is quite inconceivable that Remigius can have ornamented the capitals in the two apse-like niches of the front with foliage in single or double ranks, while the most important abbey churches erected in the island in the course of the XIth century and after the Norman Conquest contained only perfectly plain capitals, and merely, by way of exception, one here and there embellished with plain leaves at the angles, and then only where it occurred, not on the exterior, but inside the church.

Again, it is clearly to the XIIth century that we must assign the finished scalloped capitals in the portals, for this characteristic type did not see the light before that period. Lastly, it is quite impossible to ascribe the elaborate treatment of the doorways to the XIth century. The results produced by English carvers in the last quarter of the XIth century were of a very different character.

Fig. 633.—Winchester Cathedral. Part of the Old Crypt (1079–1093).

Fig. 634.—Winchester Cathedral. North arm of transept (1079–1093).

The great western towers, at least in their lower portions, and as far as the third stage, are also mainly the work of Bishop Alexander. The elaborate decoration of some of the arcading and string-courses is of the same date as that on the west front, and we know that the blank intersecting arcading which embellishes the towers and their gabling cannot belong to the time of Remigius. In the much altered westernmost bay of the nave, now forming a kind of narthex, a fragment of his triforium may be observed, and also part of the wall passage made by Alexander.

Lincoln Cathedral, though contributing no new element to

the formation of the historical chain which it is our object to construct, is still worthy of attention as being the first instance in England, after Durham (1093–1131), of a nave on a great scale with a solid roof. Before taking leave of the church we may say that we shall discuss the important reliefs of the west front when we deal with the porch of Malmesbury Abbey.

WINCHESTER CATHEDRAL, rebuilt in 1079 by Bishop Walkelin (1070–1098), who had previously been a monk at Saint Étienne, Caen, and succeeded the deposed

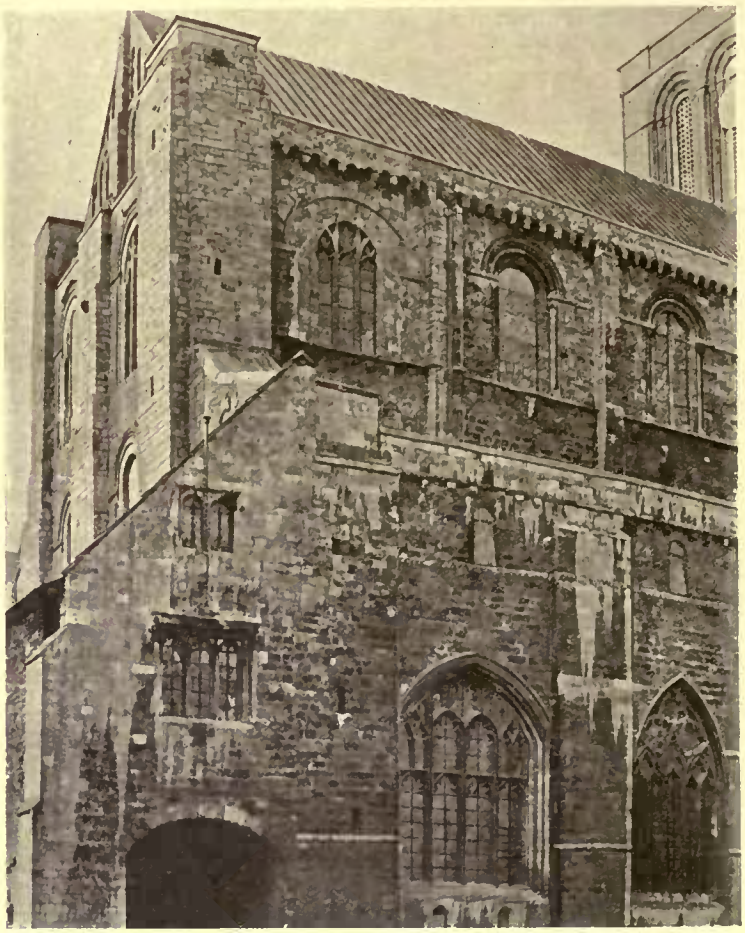


Fig. 635.—Winchester Cathedral. South arm of transept (1079–1093).

Stigand (1047–1069), was consecrated in 1093.[1] The lantern tower, owing to its defective construction, fell in 1197, but it was soon after rebuilt in the form which it still retains. In the XIIth, XIIIth, XIVth, and XVth centuries various additions were made, and a general remodelling took place; so that all that is left of the original structure that is visible and in a fair state of preservation is the transept and the crypt.

The crypt consists of a rectangular central space ending in an apse, with surrounding ambulatory (Figs. 632, 633). The central portion, which is supported by piers, is divided into two aisles by five short cylindrical pillars, each surmounted by

[1] *Rolls Series—Annales monasterii de Wintonia.*

a capital formed by a Doric ovolo and abacus, recalling the central pier of the Chapel of the Pyx in Westminster Abbey, which belongs to the time of the Confessor. Like the ambulatory it has unraised cross vaulting. From the eastern end starts an elongated apse divided down the middle by columns carrying vaulting of the same kind.

The transept (Figs. 634, 635), partly rebuilt after the fall of the central tower, was designed with a wooden ceiling for the central space and the triforium, and

Fig. 636.—Piacenza. Duomo (XIIth Century).

unraised cross vaulting in the aisles. The latter has been in part reconstructed with ribbing, or strengthened by the addition of ribs.

We find here a form of support, new for England, consisting of a cylindrical pillar with a pilaster and a half-column attached to it from which to start a transverse arch and two springers for the groining. It was copied in Ely and Norwich Cathedrals. We may also note the blank arcading used as an interior decoration.

Walkelin's church was a production of the School of Lanfranc so far as the general conception goes, but it was erected by Norman master masons in co-operation with English workmen. The presence of the former is indicated by the vaulting in the crypt, where the irregular forms of the bays demanded the services of

skilled masons. The English element is revealed by the absence of carving, and by the bulbous bases of the transept piers; as also by the disaster which ultimately befell the central tower. The absence of Norman carvers, which we have already noticed at St. Albans, must have been due to the fact that, during the years when Abbot Paul's and Bishop Walkelin's churches were being built, the artists, perhaps not very numerous, were employed on Saint Étienne and the Trinité at Caen, the two favourite churches of the Conqueror and Queen Matilda, and also in the chapels of the castles which the Normans were steadily erecting in England.

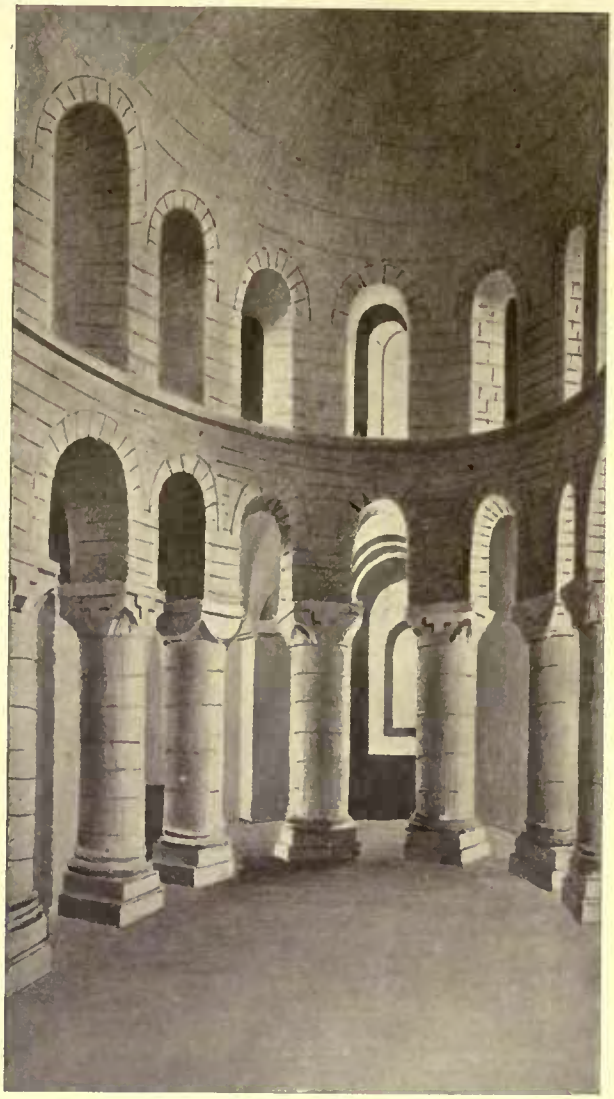


Fig. 637.—Tower of London. St. John's Chapel (about 1080). (*From a sketch by Miss P. Bruce.*)

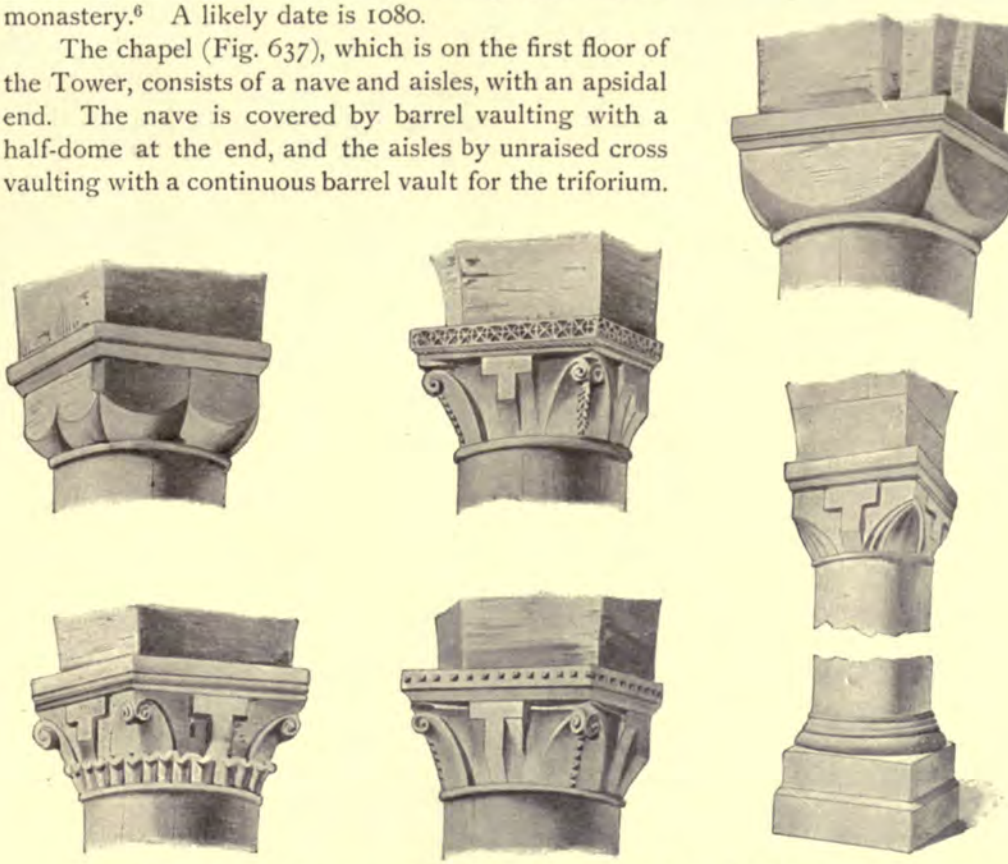
Winchester Cathedral, besides the singular form of pillar with attached half compound pier which we have noticed, affords the earliest English instance of the use of blank arcading at the base of the walls, and also of triplet arches with the middle one rising higher than the others (after the Ravennate manner), or sometimes groups of four, which appear here in the clerestory: a feature which afterwards was very freely used for the arcaded wall passages in the naves of Lombardo-Norman churches. The transept aisles, forming a continuation of the aisles of the nave, are another new feature in England. It was already to be found in St. Maria im Capitol at Cologne, and was afterwards copied in other Continental churches. In Italy an illustration is provided by the cathedral of Piacenza (Fig. 636) rebuilt in 1122 after the earthquake of 1117 had destroyed the earlier church of St. Justina. Here Walkelin's conception is amplified in the sense that the aisles of the nave not only encircle the transept but are also prolonged into the choir. We may remark in passing that the form of the nave piers at Piacenza was derived from the type which we noticed in Saint Philibert at Tournus (1008–1019), and shall see used again in great English churches.

ST. JOHN'S CHAPEL IN THE TOWER OF LONDON.—We do not know the exact date of the erection of the fortress to which this chapel belongs. Though it is

stated by William of Poitiers [1] that the Conqueror built a castle at London after his coronation (1066), it is thought that this means a mere palisade with a ditch, and that the masonry construction was not begun till 1078 or 1080.[2] We hear of the new structure as the "Tower of London" as early as 1097.[3]

The architect was Bishop Gundulf,[4] the capable builder of the castle at Rochester.[5] It is probable that it was not begun immediately after 1077 when he became bishop (having previously been Lanfranc's proctor), as he must have been deeply occupied in remedying the miserable state in which he found his bishopric, installing the Benedictines, and providing them with a monastery.[6] A likely date is 1080.

The chapel (Fig. 637), which is on the first floor of the Tower, consists of a nave and aisles, with an apsidal end. The nave is covered by barrel vaulting with a half-dome at the end, and the aisles by unraised cross vaulting with a continuous barrel vault for the triforium.



Figs. 638, 639, 640, 641, 642, 643.—Tower of London. Capitals in St. John's Chapel (about 1080). (*From sketches by Miss P. Bruce.*)

I believe it to have been the work of Norman builders and craftsmen, as, indeed, was the whole of the Tower. The Normans being, as has been observed,[7] the importers of this type of fortress into England, we cannot suppose that they employed inexperienced English masons on work that was quite unfamiliar to them. The presence of Norman craftsmen is attested, apart from the form of the vaulting, which is unusual in English Lombardo-Norman churches, by the artistic details (Figs. 638, 639, 640, 641, 642, 643), especially the foliated capitals, quite alien to English taste at the time.

[1] Duchesne, *Hist. norm. script. ant.—Gesta Guillelmi ducis Normannorum et regis Anglorum.*
[2] Clark, *Mediaeval military architecture in England.*
[3] Sparke, *op. cit.—Chronicon Angliae: per Johannem abbatem Burgi S. Petri.* [4] Hearne, *Textus Roffensis.*
[5] Wharton, *op. cit.—Ernulfi episcopi Roffensis collectanea de rebus Ecclesiae Roffensis.*
[6] Wharton, *op. cit.—Vita Gundulfi episc. Roffensis.* [7] Clark, *op. cit.*

It may be noticed that the form of the chapel, with a central arcaded space encircled by an ambulatory, reproduces Walkelin's crypt at Winchester.

ROCHESTER CATHEDRAL was rebuilt either by Lanfranc[1][2][3] or by his favourite pupil, Bishop Gundulf (1077–1108) with assistance from the archbishop.[4] This rebuilding is believed by some—and I agree with them—to have taken place about 1080 after the more pressing needs of the see and convent had been attended to, during which interval the old church was left standing. It was not, however, completed till the time of Archbishop William I (1123–1136), when the consecration took place in 1130 or 1133, and also the translation into the new church of the body of the bishop St. Ithamar (655), whence one may reasonably suppose that it was about then that the old church was demolished.

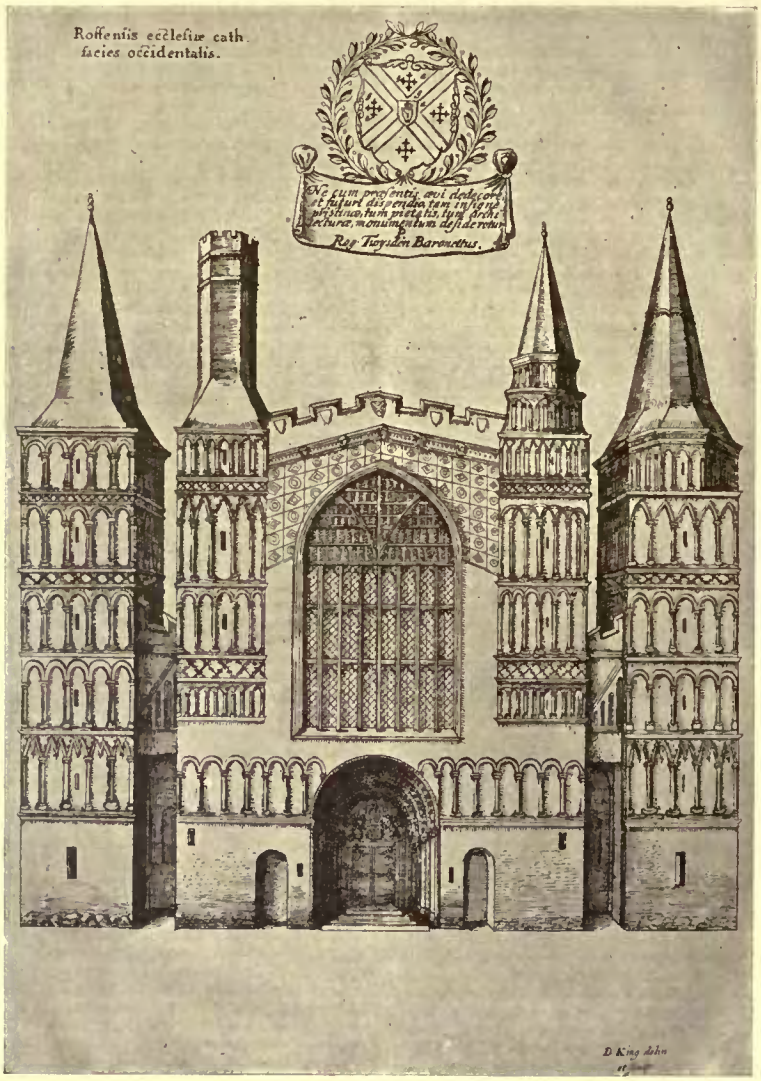


Fig. 644.—Rochester Cathedral. West front in XVIIth Century. (*From Dugdale, "Monasticon Anglicanum."*)

After suffering serious injuries from fire in 1137 or 1138 and 1177 or 1179,[5][6] and being repaired, altered, and partly rebuilt (Fig. 644), the only portions that I have found surviving from the age of Gundulf, and therefore of interest for our subject, are the two western bays of the extensive existing crypt, and some remains of rude

[1] Wharton, *op. cit.—Excerpta ex chronico Cantuariensi, de Roberti Winchelsey archiepiscopi rebus gestis.*

[2] *Rolls Series—Radulfi de Diceto decani Lundoniensis opera historica.*

[3] *Rolls Series—Eadmeri historia novorum in Anglia.*

[4] Wharton, *op. cit.—Vita Gundulfi episcopi Roffensis authore monacho Roffensi coætaneo—Ernulfi episcopi Roffensis collectanea de rebus Ecclesiæ Roffensis*

[5] *Rolls Series—Gervasii monachi Cantuariensis opera historica.*

[6] Wharton, *op. cit.—Annales Ecclesiæ Roffensis, ex historia ecclesiastica Edmundi de Hadenham.*

masonry. The bays of the crypt have short cylindrical piers, surmounted by funnel-shaped cubical capitals (imitations of Lombardic cubical capitals), hewn with the axe, and covered by a plain abacus. Below these piers are clumsy bases consisting of a plinth with thick ovolo, or else plinth, large half-roll, and necking. From them springs rough unraised cross vaulting without visible arches. Evidence of this kind both in construction and decoration clearly points to Anglo-Saxon handiwork. To the same source is due, as at St. Albans, the fact that the axis of the church points south-east, whereas the primitive church of the time of Justus, first bishop of Rochester, was correctly orientated.

Fig. 645.—Ely Cathedral. North arm of main transept (XIth and XIIth Centuries).

We know that Gundulf's church was terminated by a rectangular space instead of an apse. Some think that this was the germ of the "Lady Chapel" possessed by so many English cathedrals, whereas, as far back as 938, Saint Bénigne at Dijon had a square chapel at its eastern extremity, dedicated to the Mother of God. It was a feature perhaps derived from the old St. Peter's at Rome, where behind the apse stood the mausoleum of the Anicii, or church erected by Sextus Anicius Petronius Probus, prefect of Rome in the second half of the IVth century.

ELY CATHEDRAL. The abbey church founded in 673 by Etheldreda, wife of Ecgfrid, king of Northumbria (670–685), and consecrated as abbess by Wilfrid, was burned by the Danes in 870 and rebuilt in 970 by Ethelwold, bishop of Winchester (963–984). Abbot Simeon (1081–1093), who had previously been a monk at Saint Ouen, Rouen, and prior of Winchester (where his brother Walkelin was bishop), took in hand its reconstruction in 1083. The work was completed in 1106 by Abbot Richard (1100–1107), formerly a monk of Bec ("ecclesiam suam a praedecessore

suo incoeptam aedificavit"); and it was he who translated into it the body of St. Etheldreda.[1]

In 1109 the church became a cathedral. Bishop Geoffrey Ridel (1174–1189) erected the western transept, and a new west front with its tower nearly up to the roof; for this is surely the meaning of the words "novum opus usque occidentem cum turre usque ad cumulum fere perfecit,"[2] and not that he built the body of the church from the third bay west of the eastern crossing, or that he completed the west

Fig. 646.—Ely Cathedral. North arm of main transept (XIth and XIIth Centuries).

end of the old church, as has been suggested, for there is nothing in the building answering to such an interpretation.

Bishop Eustace (1198–1215) next added the narthex or Galilee to Ridel's work. In the XIIIth century, under Bishop Northwold (1229–1254), the choir was lengthened; and the central tower, after its fall in 1322, was rebuilt as an octagon instead of a square, involving the demolition of two of the transept bays and the reconstruction of three of those of the choir. In this way all that was left of the work of the XIth and XIIth centuries was the arms of the choir transept (Figs. 645,

[1] Wharton, *op. cit.*—*Thomae monachi Eliensis historia Eliensis.*
[2] Wharton, *op. cit.*—*Monachi Eliensis continuatio historiae Eliensis.*

646), and the nave (Fig. 647) as far as the western transept, the northern arm of which is wanting. The eastern transept is aisled. The central portion and the triforium had from the beginning wooden roofs, the aisles having unraised cross vaulting. The roofs of the nave and its aisles were treated on the same principle.

The general effect of Ely Cathedral recalls its elder sister, Winchester, and the hemispherical cubical capital predominates.

We do not share the theory that the nave of the church was completed by Bishop Ridel, or in the reign of Henry II (1154–1189). Besides being opposed to

Fig. 647.—Ely Cathedral. Nave (XIIth Century).

the statements of the Ely Chronicle, it is also at variance with the aspect of the building. The more recent parts of the eastern transept, which must be assigned to Abbot Richard—for the older, that is to say the plainer parts, belong, of course, to Simeon—show too strong analogies of organic structure, masonry, and decoration, with the rest of the church for us not to recognize the single idea which informs it, and the impossibility of keeping that idea unchanged through the long series of years between 1106 and the reign of Henry II. The spirit, moreover, which animates Geoffrey Ridel's work is too distinct to allow us to regard it as a mere continuation of an unfinished structure left by his predecessors. On the contrary, the church must have been perfect and complete, as is indicated by the alterations required in order to fit the new work on to the old.

I think that the small Lombardic portal known as the "Prior's doorway," a later insertion in the south aisle wall, should be ascribed to Ridel. Its design is more in keeping with his time than with that of Eustace, in whose Galilee the pointed arch predominates.

Ely Cathedral was the first English church which exhibited the Romano-Ravennate decorative feature of an arched corbel course. But apart from this we have not discovered any other new element.

WORCESTER CATHEDRAL was rebuilt in 1084 by Bishop Wulstan II (1062–1095) in place of the church erected by Oswald, bishop of Worcester (961–992) and archbishop of York (972–992) which in its turn was the successor of the original structure (680) of the time of King Ethelred and Archbishop Theodore. It was seriously damaged by fire in 1113, and injured by the fall of the central tower in 1175; and the dedication did not take place till 1218.[1] [2] The only parts of Wulstan's work spared by later reconstructions, which are of interest to us, are a considerable portion of the crypt under the choir, and a portion of the south-east pier of the central tower.

Fig. 648.—Worcester Cathedral. Crypt (1084).

The crypt (Fig. 648) consists of a rectangular central space, terminated by a semicircle with a surrounding ambulatory, flanked by two apsidal chapels. The capitals of the columns are of the Lombardic cubico-spherical type, occasionally chamfered off in the lower part in order to fit the shaft. Some of the bases are of Anglo-Saxon type, with two thick rolls and an ovolo.

What is left of the pier is interesting as illustrating the types of capital and base used in the church proper, which were the same as those in the crypt.

The remains of Wulstan's church contain no specially noteworthy feature. It was evidently the work of both Norman and Anglo-Saxon hands, the presence of the latter being betrayed by the fall of the central tower less than a century after its erection. The towers built by Norman masons did not share the fate which, as we have seen, befell the similar towers of Winchester and Ely. Norman hands are seen in the cross vaulting of the crypt, a task demanding skill only acquired by long

[1] *Rolls Series—Annales prioratus de Wigornia.*
[2] *Rolls Series—Willelmi Malm. monachi gesta pontificum Anglorum.*

practice in this difficult craft. The carvers employed were Anglo-Saxon, as can be seen from the clumsy attempts to decorate two of the plain capitals in the crypt, and also from the base mouldings. And this is confirmed by the decorative features of the arched passage or Slype (Fig. 649) leading out of the west side of the cloister, where the bulbous capitals formed by a very large roll between two smaller ones (which inverted form the base as well), or by a curiously moulded bulbous roll, are surely of Anglo-Saxon character.

Fig. 649.—Worcester Cathedral. Arcading in the Slype (1084).

THE PRIORY CHURCH, MALVERN, was founded by the monk Alvius or Aldwine in 1085.[1] The principal remains of the original church consist of the six arches on either side of the nave, supported by stout cylindrical piers (Fig. 650) and their responds, with a portion of the wall above them; remains of the west front and south aisle; and the connection between the latter and the transept. In the south wall there is also an original portal, the jamb shafts of which have bulbous capitals and bases of the same shape, only inverted. Both nave and aisles had wooden ceilings.

The construction of the church must be set down to Anglo-Saxon masons, whose presence is shown by the almost entire absence of ornament, and also by the decorative details of the portal.

Malvern Priory Church is noteworthy for an innovation in the form of the supports, that is to say, the employment of heavy cylindrical piers to carry the nave arches. It is true that cylindrical piers had previously been used in the Chapel of the Pyx at Westminster Abbey, in the crypt at Winchester, and the chapels of Durham Castle and the Tower of London; but all the same it was at Malvern that substantial supports of this form made their first appearance in an English monastic church of large size. From Malvern they spread over England, sometimes short and squat, in other cases elongated like their prototypes in St. Philibert at Tournus (1008–1019); in one place quite plain, in another decorated in various ways, and surmounted by the usual capital derived from the type we first found in the crypt at Winchester. They were either plain, or else embellished with inverted truncated semi-cones, foliage, flowers, arcading, interlacing, lozenges, discs, and other ornamental motives. They occur in churches from London, where they appear in St. Bartholomew's, Smithfield, founded in 1123,[2] to Carlisle, where we find them in the Norman

[1] *Rolls Series—Annales prioratus di Wigornia.*
[2] Moore, *The Church of St. Bartholomew the Great.*

Fig. 650.—Malvern. Priory Church (1085).

part of the cathedral (built when William Rufus restored the city in 1092)[1] with spurs added at the corners of the base plinth, the earliest instance of this Lombardic feature known in England.

These cylindrical piers had a long career, so that in the second half of the XIIth century we find them still employed, for instance, in the navé of Hereford Cathedral, belonging to the time of bishop William de Vere (1186 – 1199). Or, again, in Waltham Abbey (Fig. 651), founded as the Church of the Holy Cross and St. Laurence in 1062, and rebuilt by Henry II when he installed in it canons regular.[2][3] The original carving on the capitals of the south door exactly fits the second half of the XIIth century. Of the church consecrated in 1066 no trace is left.

GLOUCESTER CATHEDRAL.—St. Peter's Church, Gloucester, was originally founded in 681 by Osric, under a grant from Ethelred, king of Mercia (675–704). Another king of Mercia, Beornwulf (who according to Henry of Huntingdon [4] only reigned one year), rebuilt it in 823. Aldred, bishop of Worcester (1046–1062) and archbishop of York (1060–1069), rebuilt and dedicated it in 1058. Finally, Abbot Serlo (1072–1103), who had been a canon of Avranches and a monk at Mont

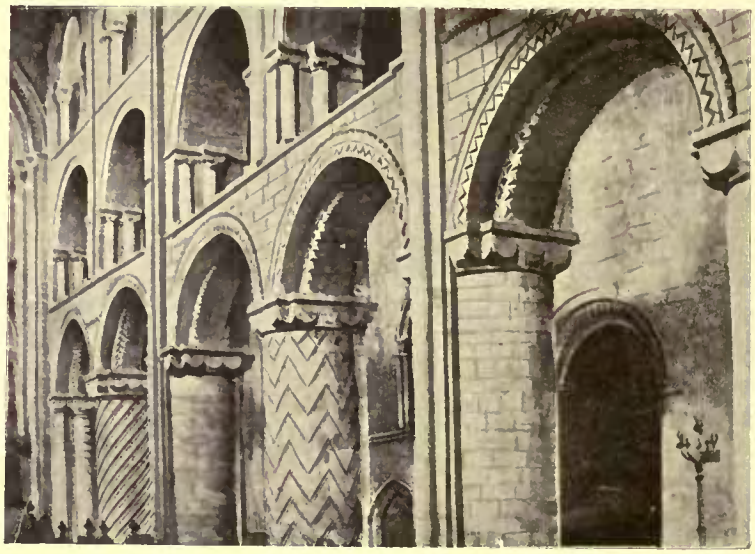


Fig. 651.—Waltham Abbey Church (XIIth Century).

[1] King Eley, *The cathedral church of Carlisle.*

[2] *Rolls Series—Annales monasterii de Waverleia.*

[3] Leland, *Collectanea de rebus Britannicis.*

[4] *Rolls Series—Historia Anglorum.*

Saint Michel, began to build it anew in 1089, not leaving one stone upon another of Aldred's work. The dedication took place in 1100.[1] [2]

Extensive damage was done by the fire of 1102 ("ecclesia S. Petri Gloucestriae cum civitate igne cremata est"), and the church must have suffered again in 1122 when the monastery was burned. At later dates it was again injured in parts by fire, suffered from an earthquake, lost one of its western towers, and was altered and partly rebuilt in the Pointed style.

Fig. 652.—Gloucester Cathedral. Capital in the Crypt (1089–1100).

The plan of Serlo's Church is the usual one derived from William of Volpiano's design for Bernay (1013), that is to say a basilica of Latin cross form with nave and aisles, and two apses projecting from the eastern walls of the transept. The only difference is in the two-storied ambulatory surrounding the choir, with three radiating chapels opening out of it.

The original crypt consisted of a central rectangular space with a semicircular end, enclosed by piers with arches. Columns divide it into three aisles, and it is encircled by an ambulatory containing three radiating apsidal chapels. One of the capitals (Fig. 652) has on one face a rude human head, as it were flattened, in very low relief without any undercutting. In the eastern radiating chapel the two columns which support the arch of the apse have capitals with four truncated inverted half-cones on the face, which form the archetype of the scalloped capital (Fig. 653). At the entrance to the crypt are two more small chapels corresponding to those in the transept above.

Fig. 653.—Gloucester Cathedral. Scalloped Capital in the Crypt (1089–1100).

The nave of the church is separated from the aisles by cylindrical piers (Fig. 654). The first two bays, together with the west front, are work of the XVth century. The walls of the nave above the arches are pierced by pairs of two-light openings for the triforium (which has a wooden roof), divided by shafts with scalloped capitals. Above this runs the clerestory passage, altered when the wooden roof of the nave was replaced by vaulting.

The north aisle still retains its original unraised cross vaulting with moulded ribs. The awkward manner in which they meet the piers is due, not to the fact that the piers were originally intended only for groined cross vaulting, but to the unfitness of cylindrical piers for receiving multiplied arches. For though such piers have over the Lombardic form the advantages of taking up less room and therefore facilitating circulation, and of permitting the passage of more light, they have at the same time the drawback of being ill adapted for carrying cross vaulting, which requires supports specially planned to receive it.

[1] *Rolls Series—Historia et cartularium monasterii S. Petri Gloucestriae.* [2] Dugdale, *ob. cit.*

Fig. 654.—Gloucester Cathedral. Nave (XIIth Century).

Considerable alterations were made in the transept in the course of the XIVth and XVth centuries.

The choir has now lost its apse. The ambulatory is covered by unraised cross vaulting (Fig. 655). Of the three radiating chapels which originally opened out of it, that on the south is well preserved. In it two rude wall-arches of pointed form should be noticed.

The interior of the choir now presents to the eye a facing of Perpendicular work, with a vaulted roof of the same style. No doubt it originally had a wooden roof. Wide spans were not vaulted in England till a much later date, and, moreover, if there had been vaulting it would have been preserved. The theory that the ramping barrel vaulting of the triforium was constructed to resist the thrust of the choir vault is readily disproved by the fact that, under exactly the same conditions, the nave of Saint Étienne at Caen had a wooden roof.

Fig. 655.—Gloucester Cathedral. Ambulatory of Choir (1089–1100).

The ambulatory has an upper story, from which again three chapels originally opened. It has a half-barrel vault divided into sections by ramping transverse arches (Fig. 656).

The Lombardo-Norman portions of Gloucester Cathedral belong to two different periods, and are the result of two distinct events, viz. Serlo's reconstruction, and the catastrophe of 1102. To the first belong the two-storied ambulatory of the choir and the crypt below it;

to the second, the nave. Each period is revealed by characteristic features, which at the same time differentiate it from the other.

Thus the crypt and the choir have Lombardic cubical capitals, or else scalloped capitals, but not as yet perfected as in the body of the church. The choir arches, too, are in two orders, but not moulded. The unraised cross vaulting of the ambulatory is simply groined, and the transverse sustaining arches are clumsily fashioned. Moreover, ornament is in every case banished from the arches, and the wall supports consist of plain engaged shafts. Lastly, the choir has its ambulatory in two stories of the same width, and both vaulted. The choir and its junction with the transept are therefore to be regarded as undoubtedly the work of Serlo, for they are similar in style, and show a less advanced stage of art than the nave and aisles.

The body of the church, on the other hand, is the embodiment of constructive, statical, and decorative ideas which are diametrically opposed to all this. The squat piers of the choir are replaced by lofty ones, at the expense of the triforium stage, reduced to the smallest possible dimensions, and covered only by a sloping roof. The nave arches have mouldings and ornaments. In the aisle which remains the cross vaulting has moulded ribs, and is sustained, like the transverse arches, by half wall piers with capitals, sometimes elaborately decorated, exhibiting carving which is superior both in design and execution to that of the ornamented capitals in the crypt.

Fig. 656.—Gloucester Cathedral. Upper ambulatory of choir (1089-1100).

It is easy to see that the choir and the nave of the cathedral are distinct from one another both in system and in date, a fact which has been remarked by others.[1] Accordingly, the nave is the result either of a rebuilding of Serlo's work which had been ruined by the fire of 1102, or of a completion of it after a new design. So sharp and marked a change in the work is inconceivable if the church had been begun and finished by the original architect. Moreover, that the nave was built after 1102 and not after 1122, is proved by the traces of fire still visible, which must be referred to the conflagration of 1122. Further, the transept turrets with their intersecting arcading are, in all probability, later than the days of Serlo, as this form of decoration did not appear in England before the erection of Durham Cathedral (1093).

Gloucester affords the earliest perfect specimens of the characteristic scalloped capital. We saw it in its elementary form at St Albans, and now find it in its complete

[1] F. Bond, *English cathedrals illustrated.*

shape in the eastern chapel of the crypt, and in an embellished form in the body of the church.

It is also the earliest case in England of a choir and transept triforium entirely vaulted; while the two rude pointed arches in the south choir chapel are the earliest instance of the use of that form in construction. It was not long before it was employed in one of the monastic buildings connected with the church. The difference between the construction of the cross vaulting in the crypt and that in the lower choir ambulatory, and also the occurrence in the crypt of foliated capitals and of one with a human head, show that both Norman and English carvers and masons were employed. The Normans, for instance, are responsible for the best of the vaulting in the crypt. The foliated capitals and the carved head must also be ascribed to them.

Fig. 657.—Norwich Cathedral. Choir (XIth and XIIth Centuries).

Buildings erected in England in the XIth century, after the Conquest, are almost devoid of artistic features of this kind, so common in Normandy; and this means that, for the time immediately following the Conquest, wherever we do not find Anglo-Lombardic or scalloped capitals and bulbous bases, there, in all probability, we may recognize Norman hands.

Before leaving Gloucester Cathedral we may observe that the Chapter House, altered at the east end, embellished internally with blank arcading, covered by a pointed barrel vault provided with transverse moulded ribs, and showing traces of fire, seems to show the same decorative motives as the nave (zigzags and billets), and should be dated after the fire of 1102. To the same period belong the arched passage or Slype on the south side of the Chapter House, and some parts of the old Abbot's Lodging, the present Deanery, for instance, the rectangular room with a barrel vault and scalloped capitals. These buildings, having solid roofs, may have escaped the disaster which destroyed the monastery in 1122.

NORWICH CATHEDRAL was founded with the dedication of the Holy Trinity in 1096 by the Norman bishop, Herbert Losinga (1094–1119),[1] originally prior of Fécamp, then abbot of Ramsey, and afterwards bishop of Thetford, whence he transferred the see to Norwich in 1094.[2] The greater part of it is his work.[3] The

[1] Dugdale, *op. cit.*

[2] Wharton, *op. cit.*—*Bartolomei de Cotton monachi Norwicensis annales Ecclesiae Norwicensis.*

[3] Wharton, *op. cit.*—*Historia de episcopis Norwicensibus.*

"Registrum primum," preserved in the Cathedral Treasury, states how far the work of Herbert reached, viz. to the altar of the Cross or St. William on the north of the choir enclosure, though the writer's information was only derived from the tradition current in his time.

In the "Anglia Sacra"[1] Bishop John of Oxford (1175–1200) is credited with the completion of the church, but the work of this prelate was really confined to the

Fig. 658.—Norwich Cathedral. Nave (XIth and XIIth Centuries).

repairs necessitated by the fire of 1171.[2] I believe that the cathedral was finished by Herbert Losinga's immediate successor, Everard (1121–1145), a view which is confirmed by the evidence of the building itself.

Norwich Cathedral, though it has lost two of the five choir chapels, while a third has been altered, and though the choir has been tampered with, together with the transept (the chapel in the northern arm has disappeared), aisles, and lantern tower, while nave, choir, and transept have been vaulted in the Pointed style, nevertheless, on the whole, still retains its original form. The plan reproduces that of Gloucester,

[1] [2] Wharton, *op. cit.*—*Historia de episcopis Norwicensibus.*

with the variation that the choir chapels are lobed instead of being rectangular with apsidal end.

The original piers of the choir (Fig. 657) consist of cylinders with engaged shafts and pilasters. The ambulatory has unraised cross vaulting of a superior character to that in a similar position at Gloucester. The triforium above has a wooden roof. Originally it must have contained ramping arches designed to give

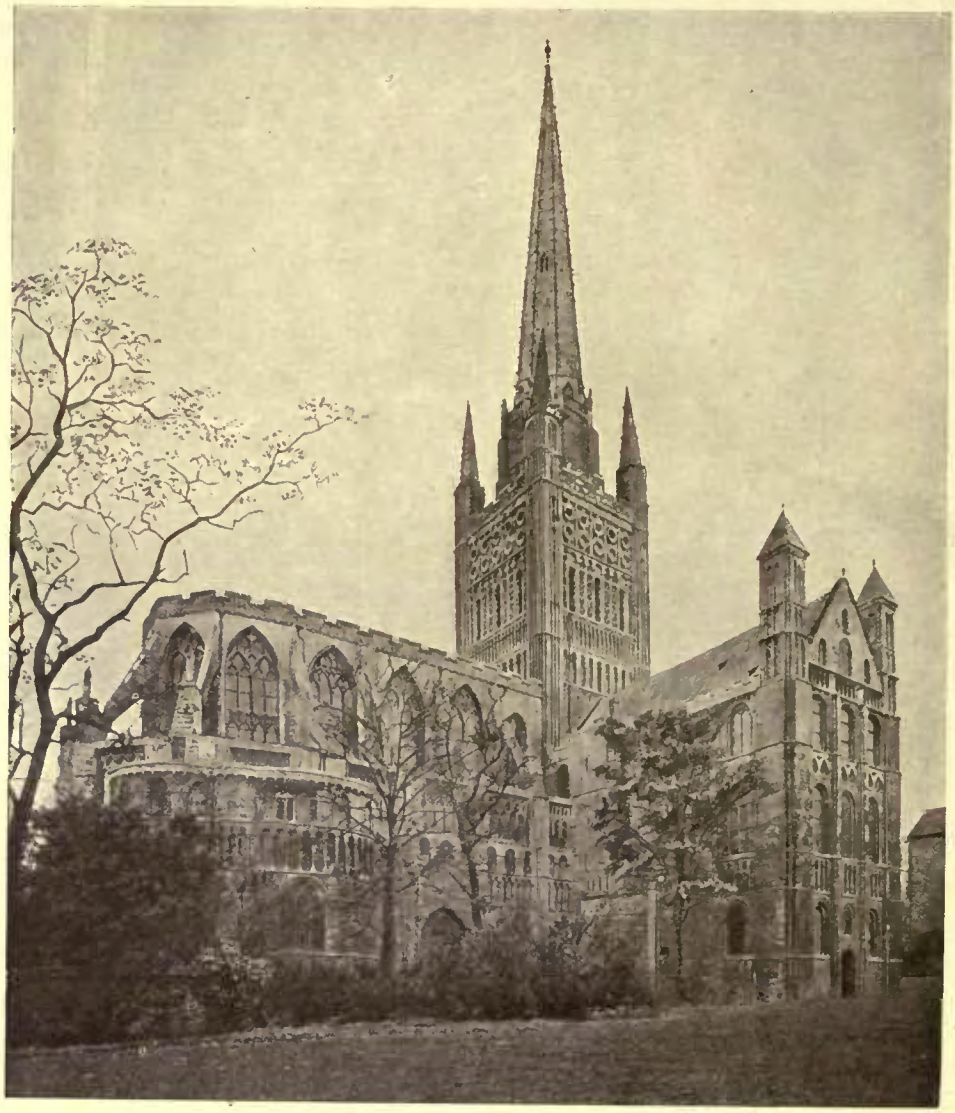


Fig. 659.—Norwich Cathedral (XIth to XVIth Century).

support to the lofty walls of the choir, which had a wooden roof before the construction in the XVth century of the present vaulting. The clerestory has been altered. The two-lobed chapels opening out of the ambulatory, and the outer walls of the choir, are decorated with blank arcading.

In the transept, which, again, had at first a wooden roof, may be seen ranges of blank arcading either simple or intersecting, with the arches in some cases surmounted by gables. A quasi-triforium is formed in the thickness of the wall, at the

level of that in the choir. The openings for the clerestory passage are either single, in pairs, or in triplets with the centre one higher than the others.

The interior of the tower has on each side an arcaded wall passage, above which is a range of pairs of blank arches, with a round opening at either end. The upper story, with its own wall passage, and elaborately ornamented, is an addition to Herbert's tower, as is shown by the difference of the original masonry.

The nave and aisles are divided by supports, alternately larger and smaller, after the Lombardic fashion (Fig. 658). Where they have not been refaced they consist alternately of compound piers and cylinders (either plain or with spiral grooving) for the first six arches: the rest are compound piers. The aisles have unraised cross vaulting, and are decorated with blank arcading.

We said that the erection of the cathedral, interrupted by the death of Bishop Herbert (1119), was completed by his successor Everard, and not by Bishop John of Oxford (1175–1200). If an interval of more than half a century had elapsed before the work was resumed, we should never have found that unity of conception and execution which pervades the building, a unity manifested by the masonry, the architectural decoration, and, with one exception, the arrangement of the church, and of so obvious a character that it takes a skilled eye to discover the line which divides the work of Herbert from that of Everard. That line is to be found in the sixth bay of the nave, for it is there that the cylindrical piers on the ground floor come to an end. Our dates for the two sets of building operations bring the statement of the Norwich Chronicle as to Herbert's share in the work into agreement with the account in the "Registrum primum," and with the evidence of the structure itself.

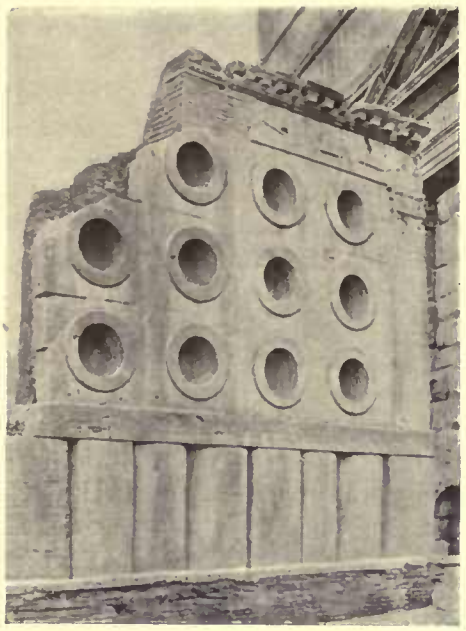


Fig. 660.—Rome. Tomb of Eurysaces (Ist Century B.C. or Ist Century A.D.).

As we look at Norwich Cathedral we cannot but be impressed by the feeling that the exterior view of the choir and transept presents a whole of an imposing effect which is not equalled by that of any other church in the Lombardo-Norman style (Fig. 659).

The most notable features are the following:—

(1) The circular openings, either closed or forming windows.

The combination and disposition of such round openings with a raised edge on the tower of Norwich is curiously reminiscent of the well-known tomb of Eurysaces and his wife Atistia, just outside the Porta Maggiore (Praenestina) at Rome (Fig. 660), believed to belong to the end of the Republic or at latest to the first years of the Empire.[1] Or it may have been derived from the round openings of a campanile such as the early XIth century one belonging to San Francesco at Ravenna. It was only about the middle of that century that such circular openings, either forming windows

[1] Caetani Lovatelli, *Passeggiate nella Roma antica—Il sepolcro di Eurisace fuori della Porta Maggiore in Roma.*

or with a decorative purpose, began to appear in English towers, as the examples at Earl's Barton, Cambridge, and Great Dunham inform us. From Norwich it soon passed to Exeter, where the south tower of the cathedral, begun by Bishop William Warelwast (1107–1136) and finished by Bishop Henry Marshall (1194–1206), displays rows of these openings between smaller ones of the same form in groups of two, four, or five. From Exeter it travelled to Ely, where the great west tower has rows of circular openings each containing a quatrefoil. These smaller apertures had occurred previously in connection with the five-light openings on the tower at Earl's Barton.

Round openings had already been used by the Roman builders to provide air and light for the wooden roofs of buildings and for the buildings themselves, as may be seen in the Temple of Ceres and Faustina, now Sant' Urbano, in the Valle Caffarella near Rome, erected by Herodes Atticus in the IInd century A.D., where the end of the building is pierced by a large round opening flanked by two windows. Their use was also extended to cupolas. Plenty of instances can be found, either in surviving remains or drawings of buildings which have disappeared. Such are the so-called "Tempio di Siepe" at Rome; the circular mausoleum in the Villa of the Gordians on the Via Praenestina near Rome; a presumable bath chamber shown in one of Bramantino's sketches reproduced by Mongeri; a structure of uncertain character which appears as an illustration in our account of the Holy Sepulchre, and has its cupola lighted by a row of round openings; and, lastly, the so-called Tower of Boethius at Pavia (which fell in 1584), the appearance of which has been preserved for us by Sangallo and Spelta.[1]

(2) The double-cone moulding, which reappears for the first time after the Romano-British age in this cathedral.

As we look at the exterior and seek for points of comparison, we are struck by the fact that, in spite of the lavish use of blank arcading, there is no suggestion of the external open galleries which had just at this time come into fashion in Italy. The explanation of their absence is to be found in the fact that when Herbert Losinga, before the transfer of the see to Norwich and the foundation of the cathedral there, visited Rome about the year 1093 in order to surrender the ring and pastoral staff which he had obtained by simoniacal means,[2] this architectural motive was only just making its appearance in its simplest form on the chapel of St. Aquilinus at Milan.

TEWKESBURY ABBEY CHURCH is believed to have been founded in 715 with a dedication to the Virgin, and must have been in existence in 800, for in that year (or in 802) Brihtric, king of Wessex, is said to have been buried in the chapel of St. Faith. It was refounded by Robert Fitz-Hamon, and put under Giraldus, abbot of Cranbourne, who now became the first abbot of Tewkesbury (1102–1109). The precise date of this new foundation is not known, but there are grounds for believing that it took place in 1102 when Giraldus and his monks at Cranbourne moved to Tewkesbury. The new church appears to have been dedicated in 1123.[3][4][5] It suffered from fire in 1178, and the new work visible at the top of the nave walls is to be explained by this disaster. It was not, however, "redacta in pulverem" as the Winchester annalist says,[6] for traces of the fire are still to be seen on the fabric. In the course of the restoration

[1] *Historia de' fatti notabili occorsi nell' universo e in particolare nel Regno de' Gothi, ecc.*
[2] *Rolls Series—Radulfi de Diceto opera historica.*
[3] *Rolls Series—Chronica magistri Rogeri de Houedene.*
[4] Dugdale, *op. cit.*
[5] *Rolls Series—Annales monasterii de Theokesberia.*
[6] *Rolls Series—Annales monasterii de Wintonia.*

the choir and transept were retouched, vaulting substituted for the wooden roof, and the form of nearly all the windows changed. Nevertheless, with the exception of the choir, the church remains as it was in the first quarter of the XIIth century (Fig. 661). The plan is copied from that of Gloucester.

Tewkesbury Abbey, built under the direction of a monk, whose name Alfred points to his being an Englishman, contains the following distinctive features.

(1) The spurred bases in the arcaded wall-passages of the nave (Fig. 662);

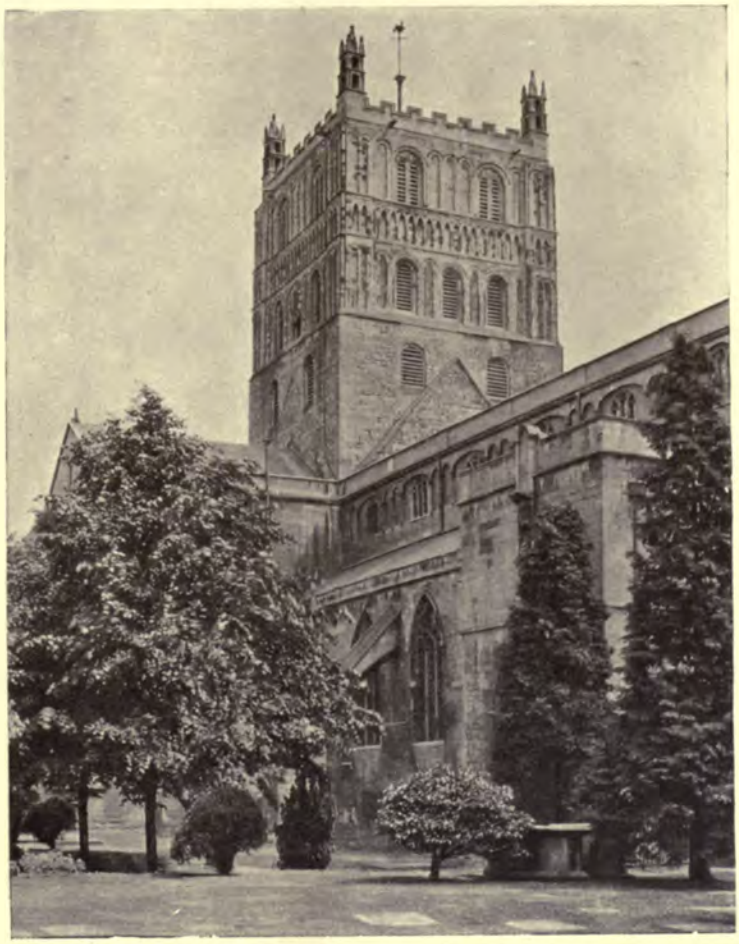


Fig. 661.—Tewkesbury Abbey Church (XIIth Century).

the second instance of this feature that we have met with in England, the first being at Carlisle.

(2) The great recess of the west front (Fig. 663), apparently suggested by the one in a similar position in the Palatine Chapel at Aachen (796–804), copied again by Bishop Alexander (1123–1148) in his cathedral at Lincoln.

(3) The unraised cross vaulting with square-edged ribs in the chapel on the ground floor of the transept, undoubtedly belonging to the early years of the XIIth century, and probably to the time of Abbot Giraldus; consequently one of the first examples to be found in England.

On taking leave of Tewkesbury we may observe that the triforium-like passage

with pairs of openings was derived from the one in Chester Abbey Church (Fig. 664) (which only became a cathedral in 1541), begun in 1093 by Hugh Lupus, Earl of Chester, who imported monks from Bec, and made Anselm's chaplain, Richard, their abbot (1093–1117), and finished by Abbot William (1121–1140). The foundation of Hugh Lupus replaced the original one of Wulfhere, king of Mercia (657–675), restored by Athelstan (925–940), and dedicated to St. Werburgh.[1]

The quasi-triforium of Tewkesbury also recalls the one in the transept of

Fig. 662.—Tewkesbury Abbey Church. Nave (XIIth Century).

Pershore Abbey (the history of which is given by William of Malmesbury[2] and Dugdale[3]), which I believe does not represent the rebuilding of the wooden church burned in 1000, but belongs to the years immediately before the refounding of Tewkesbury.

SOUTHWELL CATHEDRAL.—We know on the authority of the chronicler Thomas Stubbs[4] that the church of St. Mary, Southwell, was as old as the time of Kynsige, archbishop of York (1050–1060), who gave it two large bells. The same

[1] [2] *Rolls Series—Willelmi Malm. monachi gesta pontificum Anglorum.* [3] *Op. cit.*

[4] *Rolls Series—The historians of the Church of York—Chronica pontificum Ecclesiae Eboracensis: pars prima, auctore anonymo.*

writer mentions it again in his account of Archbishop Aldred (1060–1069). The new foundation is generally admitted to have taken place under Thomas II, archbishop of York (1108–1114), for the "Registrum Album" of the church contains a letter from an archbishop Thomas to the people of his diocese in the County of Nottingham asking for a contribution of alms towards the building. The writer cannot be either Thomas I (1070–1100) or Thomas III (1300–1304), for there is nothing in the structure answering to the dates of these prelates.

The new church (Fig. 665) had its choir rebuilt in the XIIIth century: the rest retains its original form, though it has lost the two transept chapels.

Fig. 663.—Tewkesbury Abbey Church. West front (XIIth Century).

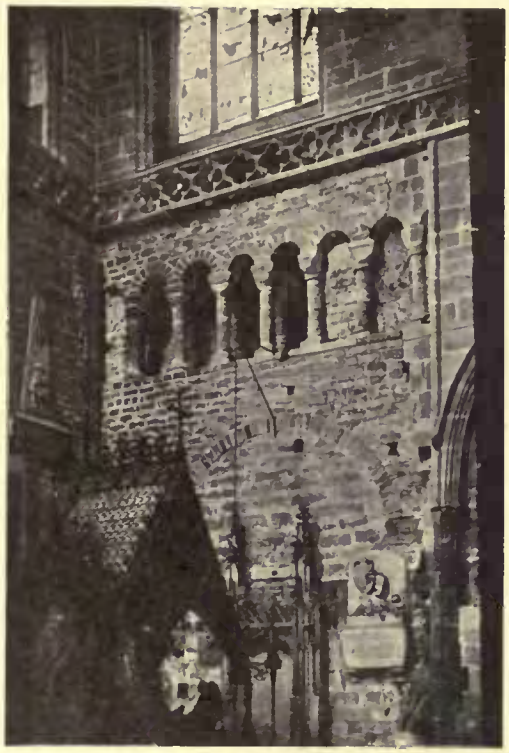


Fig. 664.—Chester Cathedral. North arm of transept (XIth Century).

The nave was designed with a wooden roof, while the aisles had unraised, ribbed cross vaulting (Fig. 666).

Southwell Cathedral appears to me to be the result of two distinct sets of operations, during the first of which the building was finished as far as the nave, while the second saw the completion of the church. This would explain the change in the mouldings of the arches in the aisle vaulting. But there can have been only a short interval between them, for the structure is evidently the result of a single conception. The interruption may have been connected with the disturbed beginning of Thurstan's primacy (1114–1140). The two operations fall within the period between 1108 and about 1125, and in any case they cannot belong to the time of Thomas I, on account of the great cylindrical piers with ornamented capitals, and of the ribbed cross vaulting. Still less can they fall in the

years of Thomas III, for in that case Southwell would have been a church in the Pointed style.

Southwell, with Gloucester and Peterborough, proves that by the first quarter of the XIIth century Lombardic ribbed cross vaulting was diffused in England. Its other noteworthy features are these.

First come the round windows which light the nave and transept (Fig. 667). This form of aperture, which we shall notice presently in the church of Steinbach

Fig. 665.—Southwell Cathedral. Nave (XIIth Century).

near Michelstadt (815–819), and in the IXth century cathedral oi Cologne, had at this time come into fashion at Rome under Paschal II (1099–1118), as SS. Giovanni e Paolo, restored after the fire of Guiscard in 1084,[1] and San Clemente tell us. The form in which it occurs at Southwell was afterwards introduced in Waltham Abbey (1177).

Secondly, there is the pointed-arched arcading which decorates the south-western tower, the earliest example of the sort in England (Fig. 668).

Inside the church we should also notice the Corinthianesque "storied" capitals, with crockets at the angles embellished with roses and other ornaments, belonging to

[1] P. Germano di S. Stanislao, *op. cit.*

the great eastern arch of the crossing (Fig. 669). They exhibit subjects from sacred story, with figures of infantile design; and also display scroll work, lilies, crosses leaves, flowers, the symbolical lamb and cross, a dove, and a chaotic group of fanciful buildings with arches and round windows which seems to represent Jerusalem, and has been described, without the smallest foundation, as a church in the Byzantine style.[1]

It has been thought that these reliefs, now a good deal hidden by the organ, are Anglo-Saxon, because they have analogies with illuminations of the epoch about 1000 (forgetting that illumination is one thing and carving another), and that they were incorporated in the XIIth century church,[2] without considering that these capitals exactly fit the shafts below them and were obviously made on purpose for them, and that the continuous abacus is of the regular Norman pattern, and, thirdly, that the crockets at the angles betray a similar origin.

Fig. 666.—Southwell Cathedral. North aisle of nave (XIIth Century).

Moreover, it is inconceivable that, at the end of the Xth century or the beginning of the XIth, the Anglo-Saxon artists should have been capable of producing figure subjects, of rude character it is true, but at the same time of such broad artistic conception, while their successors, who had so many more opportunities for the practice of their chisels after the Conquest, avoided, for a considerable period and as much as they could, the representation in carving, not only of figures, but even of foliage, and confined themselves of set purpose to geometrical forms in which they could use the axe instead of the chisel, to such an extent that in a structure of the celebrity of Ernulf's and Conrad's choir at Canterbury (1096–1130) they used the former exclusively: "Ibi arcus et caetera omnia plana, utpote sculpta secure et non scisello."[3]

OXFORD CATHEDRAL.—Ethelred II's monastery was refounded after the appointment by Roger, bishop of Salisbury (1107–1139), in 1111 of Prior Guimund,

[1] [2] *Archaeologia Oxoniensis*, 1893—*Notices of archaeological publications—The illustratea archaeologist.*

[3] *Rolls Series—Gervasii monachi Cantuariensis opera historica.*

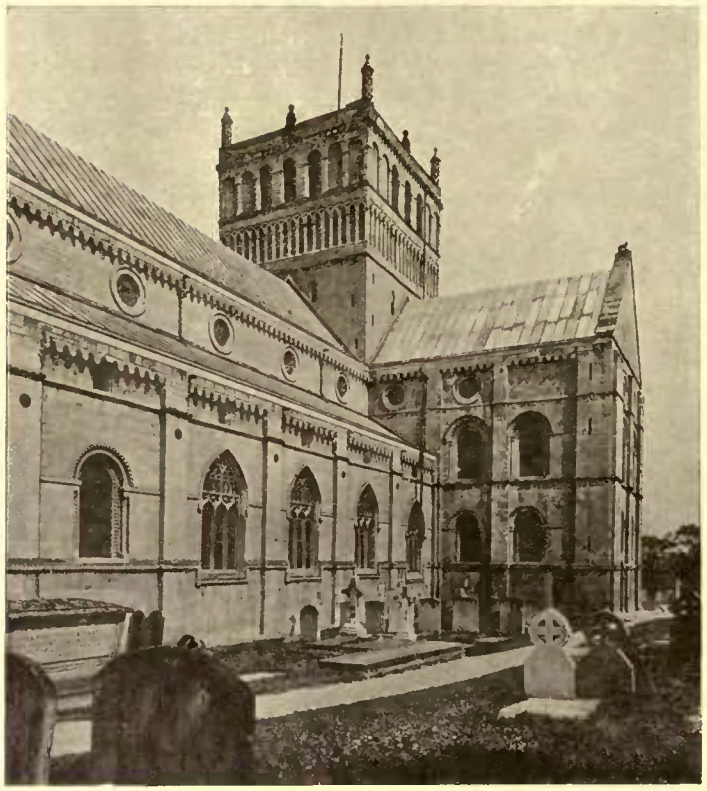


Fig. 667.—Southwell Cathedral (XIIth Century).

chaplain to Henry I (1100–1135), who provided a large endowment. Prior Robert of Cricklade (1141–1180) obtained from Pope Hadrian IV (1154–1159) a confirmation of the new privileges of his priory (1158). In 1180 the translation of the body of St. Frideswide took place, and in 1190 the church suffered from a fire: "Combusta est ecclesia Sanctae Frideswide."[1][2][3] With the last event we conclude the history of the church, so far as it has reached us, as being all that is of immediate interest for our purpose.

Oxford Cathedral contains no new element which can contribute to an exposition of the development of Lombardo-Norman architecture in Great Britain. But we may well spend a short time over a church situated in so ancient and celebrated a seat of culture and learning, especially as more has been written about it to lead students astray than to guide them along the path of truth.

The oldest parts of the building show three separate constructions, and it is with reference to their respective dates that the erroneous opinions have been formulated which we shall endeavour as briefly as possible to refute.

We have already spoken of the scanty remains of Ethelred's church, incorporated in the new one erected by Prior Guimund about 1111, the walls of which are constructed of rubble faced with courses of dressed stone. The similarity between the construction of these walls and those of the church of Bernay (1013) (we say nothing of that of Fécamp, of the year 990, which is also adduced in evidence, because we showed that there is no existing trace of it above ground) has given rise to the suggestion that they belong to the days of Ethelred. But this does not take into account

Fig. 669.—Southwell Cathedral. Capital in the crossing (XIIth Century).

[1] Dugdale, *op. cit.*

[2] *Rolls Series—Annales de Oseneia et chronicon Thomae Wykes.*

[3] *Rolls Series—Willelmi Malm. monachi gesta pontificum Anglorum.*

the difference between the condition of Normandy at the beginning of the XIth century—a prosperous, well-governed country, under the influence of the artistic and intellectual movement created by William of Volpiano and his fellow labourers, and that of England bleeding from the wounds inflicted by wars and invasions, not to speak of the vengeance, accentuated by famine, that the massacre of St. Brice's day had brought on the unhappy country. Nor does the theory consider that, from the time of Wilfrid (634–709) to that of Edward the Confessor (1041 or 1042–1066), no English dated church exhibits masonry of this kind.

Fig. 668.—Southwell Cathedral. West end (XIIth Century).

That it really belongs to Guimund's work is clearly proved by two things. The first is the presence of the much discussed pair of openings from the old quasi-triforium in the south arm of the transept, with their bulbous based shafts, their capitals with two scallops on each face, and their plain arches (Fig. 670). St. Albans Cathedral (1077–1088), was the first building of certain date to show capitals of the kind. There is no trace of a quasi-triforium of this sort before that in Chester Cathedral, founded in 1093. It is impossible, therefore, that Ethelred's church can have exhibited these features which had not been thought of in his time.

The second is the presence of thick cylindrical piers in Ethelred's reputed work, but really that of Guimund. These piers have obviously been altered, but we are not without information as to the kind of capital they possessed, for in the south choir aisle two of Guimund's time remain, with their capitals showing stiff, plain leaves at the angles. But English churches of large size did not contain stout cylindrical piers before Aldwine's application of them in Malvern Priory Church (1085), though the School of Lanfranc had used them in the crypt of Winchester Cathedral and the chapel of the Tower of London, but of smaller dimensions.

Guimund's church did not remain long intact, perhaps on account of defects

Fig. 670.—Oxford Cathedral. Opening in quasi-triforium (XIIth Century).

in construction, which would explain the new facing with which it was invested; or, it may be, owing to injury received when Stephen burned Oxford in 1152. Certain it is that the structure was remodelled, partly by rebuilding, partly by alterations, partly by facing the old work with new. All this was carried out by Prior Robert of Crickdale, after the confirmation of 1158 had put him in a position to do so, and very probably about 1170; so that the work was quite finished in 1180 when the translation of St. Frideswide took place, an event which must have been subsequent to the renewal of the church. As long ago as 1762 Thomas Warton[1] had fixed on 1180 as the date of Christ Church.

The no less discussed capitals in the choir (Fig. 671), though much decayed, are additional evidence as to the date of this restoration. They are decorated with crocket leaves, others bent as if blown by the wind, palmetto leaves, and interlaced stalks completely undercut. All are worked with a sure and vigorous hand, and have a suggestion of the Pointed style. The treatment of the foliage indicates a date contemporary with that of similar work in Canterbury Cathedral, of 1175 to 1184. The partial damage shown by their surface may be explained by some injury suffered, perhaps in the fire of 1190, involving their being scraped over.

Fig. 671.—Oxford Cathedral. Choir (XIIth Century.)

PETERBOROUGH CATHEDRAL was destroyed by fire in 1115, and two years later Abbot John of Séez (1114–1125) took in

[1] *Essay on Gothic Architecture* in *Observations on the Faerie Queene of Spenser* (2nd ed.).

hand its rebuilding. After his death the work made slow progress, his successor, Henry of Anjou (1128–1133), if we are to believe the account of him in the Anglo-Saxon Chronicle, not being the person best fitted for the task. It was not till 1140 or 1143 that the monks took possession of the new choir which had been completed by Abbot Martin of Bec (1133–1155). The works were continued under Abbots William of Waterville (1155–1175), who erected the transept and the three lower stages of the lantern tower, and Benedict (1177–1193), who constructed the nave as far

Fig. 672.—Peterborough Cathedral. South arm of transept (XIIth Century).

as the west end. The last additions were the western transept and west front, and the church was dedicated in 1237 under Abbot Walter of Bury St. Edmunds (1233–1245).[1]

In later times, from the XIIIth century onwards, the bell-tower was erected, the windows altered, the central tower rebuilt in the Pointed style keeping only two of the supporting arches and the piers, recently reconstructed on the old lines. Further, a porch was added to the west front, and the eastern end of the choir was concealed by a new structure. In 1541 the abbey church became a cathedral.

[1] Sparke, *op. cit.*—*Chronicon Angliae per Johannem abbatem Burgi S. Petri—Hugonis Candidi coenobii Burgensis historia.*

Choir, transept (Figs. 672, 673) and nave (Fig. 674) were designed with wooden ceilings, but the aisles had from the beginning unraised ribbed cross vaulting (Fig. 675). The date of the painted ceiling of the nave has been the subject of much controversy. I have examined it, especially from under the roof, and have come to the conclusion that it belongs to the XIVth century, when the lantern of the central

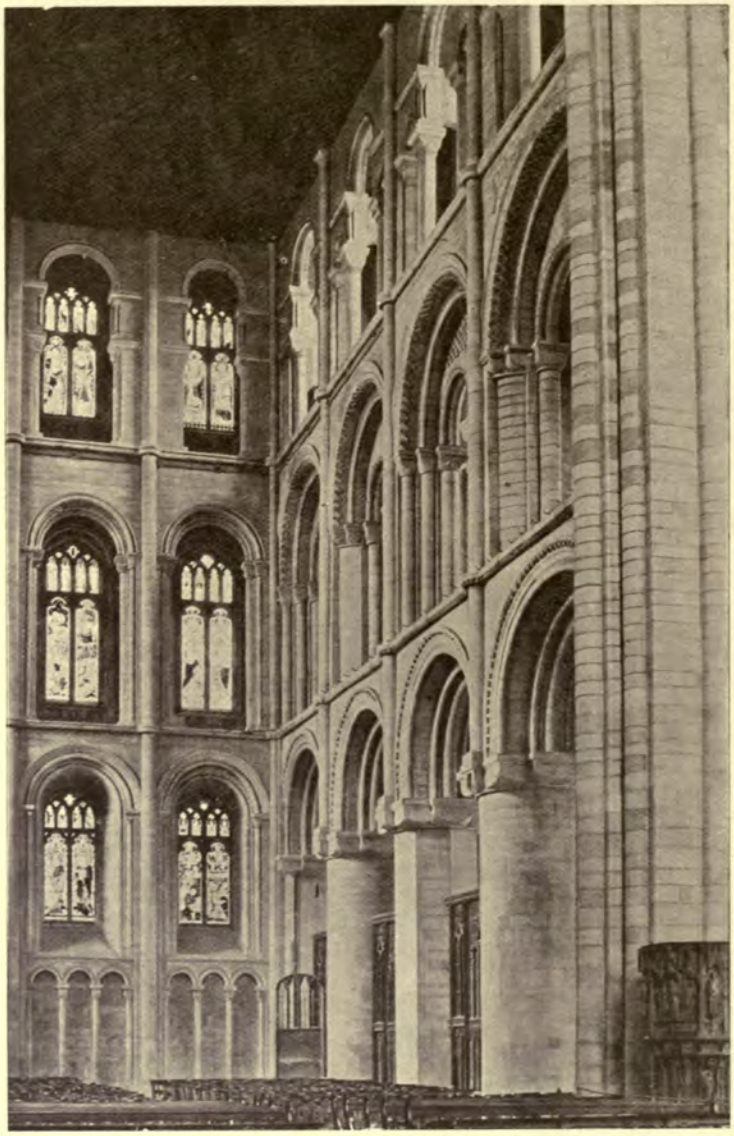


Fig. 673.—Peterborough Cathedral. North arm of transept (XIIth Century).

tower and its eastern and western arches were rebuilt, and the original flat ceiling was replaced by a new one which fitted the new pointed western arch of the tower. Moreover, we cannot imagine that there would have been any question of so rich a ceiling at a time when the nave which it covered showed such poverty of decoration.

Peterborough Cathedral tells the same story as the one preserved by the Chronicle and History of the monastery to which we have referred. The work of John of Séez includes the apsidal end of the choir with its perfectly plain arches, and the

choir aisles west of the apse, where again the capitals are absolutely plain. To Abbot Martin are to be assigned the upper story of the choir aisles, which shows a larger amount of ornament and embellished capitals, and also the eastern side of the transept. William of Waterville is responsible for the completion of the transept and the erection of the first two bays of the nave and aisles, where the tympana of the triforium arches repeat the decoration found in the choir and transept. Benedict extended the nave to the west end.

The unraised ribbed cross vaulting in the choir aisles should be noted. It is

Fig. 674.—Peterborough Cathedral. Nave (XIIth Century).

original and not the result of alterations in the course of which the diagonal ribs were added, as has been mistakenly suggested. This I was able to verify for myself when the central tower was being rebuilt. This vaulting was unquestionably constructed between 1117 and 1125, and it provides a fixed point for the history of Lombardic ribbed cross vaulting in England.

DURHAM CATHEDRAL, erected and dedicated in 998 by Bishop Aldhun (990–1019), was rebuilt by Bishop William of St. Carilef (1080–1096), first a secular priest of the church at Bayeux, and then monk and prior of the convent of Saint Carilef (Saint Calais). The first stone was laid in 1093. How much of the

Fig. 675.—Peterborough Cathedral. South aisle (XIIth Century).

building he erected we do not know precisely. All we are told is that, after a vacancy of three years in the see, William's successor, Rannulf Flambard (1099–1129), found that the work of the late bishop and the monks reached as far as the nave. These works, which must have included the two easternmost bays of the nave aisles, as the cross vaulting is of the same character as that in the choir aisles and transept, were not completed; for we hear that at the translation of the relics of St. Cuthbert in 1104 the choir was still blocked up with the timber used for the construction of the recently finished vaulting.

Between 1129 and 1133, when there was another vacancy in the see, the monks completed the nave, that is to say, they roofed it with vaulting, as we are told in a well-known passage relating to Rannulf's work: "His namque sumptibus navem ecclesiae circumductis parietibus ad sui usque testudinem erexerat"—"muros navis novae ecclesiae Dunelmensis fabricavit."[1][2][3][4]

Durham Cathedral, though deprived of its original east end, replaced by the secondary transept in the XIIIth century, with the central tower almost entirely rebuilt, the west front altered and partially concealed by the present Galilee, the western towers raised by four arcaded stories, and changes effected in other ways, still remains on the whole such as it was when erected between 1093 and 1133 (Fig. 676). The plan is that of a Latin cross with choir, nave, and aisles, terminating originally in an apse with minor

Fig. 676.—Durham Cathedral (XIth and XIIth Centuries).

[1] *Rolls Series—Symeonis monachi historia Eccl. Dunelm.*

[2] *Rolls Series—Symeonis monachi hist. Eccl. Dunelm. continuatio.*

[3] *Rolls Series—Willelmi Malm. monachi gesta pontificum Anglorum.*

[4] Leland, *De rebus Britannicis collectanea.*

apses at the sides. The choir aisles (Fig. 677) have ribbed cross vaulting of parabolic form springing from alternately larger and smaller supports. The choir itself (Fig. 678) has XIIIth century vaulting replacing the earlier vaulting which threatened to collapse. In the transept (Fig. 679), both the aisles and the central space are also covered with ribbed cross vaulting. We observe here corbels with semi-human heads recalling those we noticed in Saint Étienne at Caen. Later they will be used to ornament the apex of hood-mouldings above pointed arches in naves. These heads sometimes have the tongue protruding, the source of the equally characteristic monster heads with the tongue curled over the roll moulding, which occur in English doorways of the XIIth century, for instance at Lincoln and Southwell Cathedrals. They are rude work, but vigorously treated; and an experienced eye can see that the original heads in the south arm of the transept are artistically somewhat superior to those in the north.

The nave is separated from the aisles by arches resting on compound piers alternating with cylindrical piers (Fig. 680). Its cross vaulting is ribbed, and sustained by transverse arches of pointed form springing from corbel heads like those just described, but artistically more elementary than the similar ones which ornament the apex of the hood-mouldings above the pointed arches in the nave of Malmesbury Abbey, erected some time after 1153. The fact that these corbel heads are a later addition shows that the architect of the nave intended merely to throw transverse arches across it, and cover it with a wooden roof. The ribbed cross vaulting in the two easternmost bays of the nave aisles has plain ribs, as in the choir and transept aisles and in the north arm of the transept. In the case of the other bays the

Fig. 677.—Durham Cathedral. North choir aisle (XIth Century).

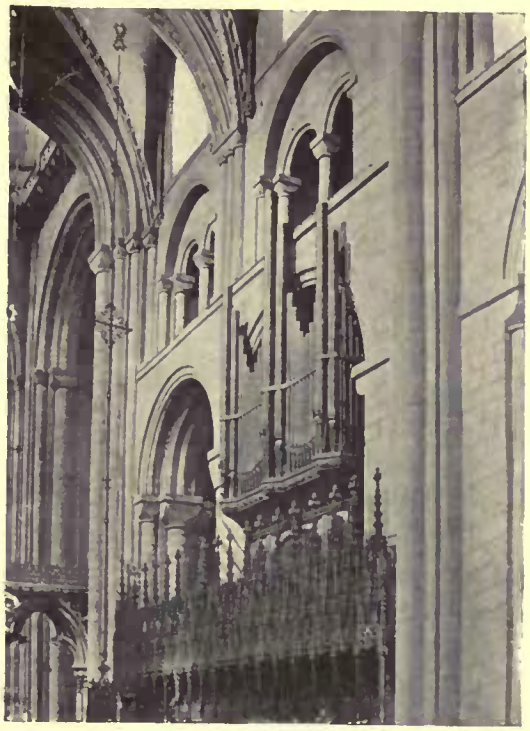


Fig. 678.—Durham Cathedral. Choir (XIth and XIIth Centuries).

diagonal ribs have the zigzag moulding, which shows that Rannulf Flambard took up the work at the second bay.

Intersecting blank arcading is freely used on the ground floor of the church. There is a triforium, with a clerestory passage above. The west front is also decorated with intersecting arcading. The archivolts of the central portal are ornamented with zigzags, foliage, medallions with human and animal figures. The jambs are left plain. The simple treatment of this doorway as compared with the two elaborately decorated ones near the west end of the aisles (Fig. 681), the shallow relief, and flat, clumsy character of its carving, show that there is an interval of several years between them. The aisle doorways may very well belong to the time of that great builder, Bishop Hugh Pudsey (1153–1195).

Fig. 679.—Durham Cathedral. South arm of transept (XIth and XIIth Centuries).

In the original parts of the cathedral the Lombardic cubico-spherical capital and the scalloped capital predominate. The only exceptions are the Corinthianesque specimens on the internal doorway near the south arm of the transept, and four others of the same type which occur in the blank arcading of the nave aisles. For bases the prevailing forms are (1) the Norman type found in Saint Étienne and Saint Nicholas at Caen, consisting of two hollow chamfers, so shallow that they appear almost like a single straight chamfer; (2) that formed by one or two slight hollow chamfers and an ovolo; and (3) that moulded into a hollow between two very flat ovolos.

Durham Cathedral presents three peculiar features worth attention.

First and foremost is the intersecting blank arcading in the choir aisles. It is the earliest specimen outside Italy: previously there had been nothing but small intersecting arches such as are carved on a capital in the crypt of Lastingham Church (about 1078). It was an Anglo-Norman invention, but whether the originator derived his idea from the large arches intersecting two smaller ones in the great Mosque at Cordova (785–900), or from the intersecting arches used in carving by the Romans and the Lombard gilds, it would be impossible to say. Certain it is, however, that it did not make its appearance before the last quarter of the XIth century.

Then there is the decorative treatment of various forms applied to the cylindrical piers with the object of relieving their ponderous appearance, and

removing the monotony of the effect. The feature appears frequently elsewhere in England.

Thirdly, there are the pairs of openings enclosed by a single arch, in the Ravennate fashion.

But the great importance of the building consists in the ribbed cross vaulting with transverse arches of round or pointed form, which it contains. Much has been written about this vaulting, and the discussion is still going on. It is argued on the one side that it is a later addition, because it is to France that belongs the credit of the invention of this form of vaulting, the principal factor of the Pointed style; while, on the other side, the view is maintained that it is of the same date as the rest of the structure, in which case the credit of the discovery will fall to England.

Fig. 680.—Durham Cathedral. Nave (XIth and XIIth Centuries).

Unfortunately the champions of the two parties have hitherto confined their researches to too restricted a field; and it has never struck them that, while they were arguing whether ribbed cross vaulting appeared about the end of the XIth century or at the beginning of the XIIth (although, as Dehio[1] rightly observes, the Lombards had already made use of the ribbed cross vault with buttresses effecting the same object as those developed later in France), this very same form had already attained a respectable antiquity in Italy. The proof of this statement depends on my discovery of the facts in San Flaviano at Montefiascone (1032). Those facts make the existence of cross vaulting with diagonal arches in Durham Cathedral, as early as the time of its rebuilder, William of St. Carilef, easy to understand. And we must not forget that when he went to Rome as an envoy from the Conqueror, he may well have had the opportunity of inspecting the new form in San Flaviano itself, for Montefiascone was one of the regular halting places on the road to the Eternal City. Moreover, the Normans were brought into direct contact with South Italy after their

[1] *Repertorium für Kunstwissenschaft*, 1896—*Die Anfänge des gothischen Baustils.*

countrymen, by the victory of Civitella (1053), and the investiture conferred by Pope Leo IX (1049–1055), had obtained a firm footing there; and, as we have seen, vaulting of this form existed in Campania. Nor is it conceivable that cross vaulting of this type was invented straight off at Durham, far away as it was from the very rare examples of intersecting vaults with visible ribs left by the Romans. In architecture, when it comes to essential elements, the idea is one thing and its execution another.[1]

The Durham ribbed cross vaults are not ordinary intersecting vaulting to which ribs have been added afterwards, for the latter are quite independent of the vaulting cells, and are thus constructed on the Lombardic principle. Nor is it a case of ribbed replacing groined cross vaulting, the idea being disproved by the vaulting shafts at the angles where the choir and transept aisles meet. The clumsy way in which the vaulting is set must be ascribed, over and above the fact that it was a first attempt on the part of the English builders, to the absence of the logical Lombardic arrangement of compound supports and plain arches.

Fig. 681.—Durham Cathedral. Portal in North aisle (XIIth Century).

The ribbed cross vaulting in the transept aisles and the first two bays of the nave aisles is of the same period, and belongs to the years between 1093 and 1099. The whole of it may be credited to English workmen, now emancipated from Norman tuition. The Normans had no previous experience of this type of roofing in their own country.

The choir itself as well as its aisles had cross vaulting. In the clerestory walls may still be seen traces of its springing marked by the junction between the original work and that of the XIIIth century. Further, the existence in the set back face of the triforium of groups of three wall shafts above the main arch piers suggests that each bay contained two quadripartite vaults with transverse visible arches springing only from the half-piers. What form this vaulting took we cannot say. It need not have been ribbed merely because that in the aisles is so, for the church of Rivolta d'Adda and Sant' Ambrogio at Milan have simple cross vaulting in the aisles, and the ribbed form or barrel vaults in the nave. Semicircular arches, intended to receive the thrust of the vaulting, cross the triforium at intervals corresponding to the half-piers and the groups of vaulting shafts. In 1235 the original vaulting of the choir threatened to

[1] *Rivista d'Italia*, October, 1908—U. Gnoli, *Le origini dell' architettura Lombarda.*

fall in,[1] and its reconstruction was carried out in 1242 by Bishop Nicholas of Farnham (1242–1248), for such must be the meaning of Leland's[2] words "fecit testudinem templi"; the choir vaulting with the corbels for the diagonal ribs being in the Pointed style, which is not the case with the vaulting of the nave.

The builders of the church had a further intention, as has been observed,[3] of vaulting the transept, for the triforium on the east side contains the regular buttress arches set in relation to the half-piers and pairs of wall-shafts. But in the course of the work they changed their minds. On the western side they omitted the pairs of wall-shafts on the face of the quasi-triforium from which the ribs of the cross vaulting were to start, and in the clerestory, on the west side of the south arm of the transept, a range of continuous arcading was constructed, evidently implying a flat ceiling. The explanation of this change is perhaps to be found in fears for the stability of the western sides, devoid of the support of the cross vaulting in the aisles and of the buttress-arches of the triforium, in view of the weight of the vaulting. However, they soon gained fresh courage and decided on the construction of vaulting, beginning with the north arm of the transept. The absence of the pairs of vaulting shafts in the triforium stage was made up for by the insertion of corbels. The plainness of the ribs suggests that they are of the same date as the cross vaulting of the choir aisles, of the transept, and of the two first bays of the nave aisles; but the carved corbels from which the ribs spring, besides being a later insertion, show an artistic advance beyond the capitals of the old door near the south arm of the transept, inserted not later than 1099, and are certainly subsequent to 1104: therefore the cross vaulting must be of the same date. The vaulting in the south arm of the transept shows the same characteristics as that in the northern, but the ribs are ornamented with zigzag mouldings, and it is therefore later.

The nave was designed for a wooden ceiling, and crossed by transverse arches to give it stability. Some interval must have elapsed before it was begun, for the "Ravennate" openings of the triforium cease in this part. The construction of the vaulting involved an alteration of the clerestory, as some arches will be noticed which have been blocked up to give room for the vaulting. It is of quadripartite form, with round diagonal arches springing from corbels, single, or in pairs, and carried on transverse arches of pointed form. Its construction shows a marked advance beyond that of the transept, and this progress is also exemplified by the form of the arched buttresses in the triforium (taking the place of the simple pilasters backing the arch piers), which are not round as before, but ramping, and counteract the thrust of the vaulting. But in spite of this difference there is a close analogy between the ribbing here and that in the transept cross vaults, so that we may very well ascribe all of them to the work of the same builders.

It has been suggested[4] that the nave vaulting, and indeed all the ribbed cross vaulting in the church with the possible exception of the choir aisles, is not earlier than 1133. I do not know at what date to fix this except in the years 1129–1133. For, on the one hand, we find in the vault construction, beginning with the choir aisles and ending with the nave, that undoubted sequence in order of time which has been noticed,[5] corresponding too, as it does, with the historical account left by Simeon and his continuator; a sequence both in construction and decoration confirmed in addition by the artistic progress shown by the corbel heads. While, on

[1] Raine, *Saint Cuthbert.*
[2] *De rebus Britannicis collectanea.*
[3] *Journal of the R.I.B.A.*, Third series, vol. vi, Bilson, *The Beginnings of Gothic Architecture.*
[4] De Lasteyrie, *Discours sur les origines de l'architecture gothique* (*Société des Antiquaires de Normandie*).
[5] Bilson, *op. cit.*

the other hand, in the series of works carried out between 1134 and 1195 under Bishops Geoffrey Rufus (1133–1140) and Hugh Pudsey (1153–1195), we meet with a more advanced style, which differentiates them from the nave.

These conclusions I had reached in 1896. Later study of the building has only strengthened them, and I have found that, on the whole, the story of the vaulting as told above, and foreshadowed as early as 1879,[1] may be accepted as the truth.

Accordingly, in default of further discoveries, Durham Cathedral must have the credit of forming the connecting link between Lombardic and Pointed architecture, in which every constituent element of the former was to gain fresh vitality and increased opportunity, while the style itself having reached a perfect development was destined by a natural process to give place to a new form.

Fig. 682.—Malmesbury Abbey Church. Nave (XIIth Century).

* * *

Before concluding the present chapter a short space may be devoted to a church which contains carving of importance for purposes of comparison: I mean

MALMESBURY ABBEY CHURCH. — The contradictory statements of William of Malmesbury leave it uncertain whether the church of St. Mary erected by Aldhelm, abbot of Malmesbury (680–705) and bishop of Sherborne (705–709), was rebuilt or at any rate restored by Elfric, who became abbot after 970, and bishop of Crediton in 977. Thus while in his life of Athelstan (925–940) he speaks of it as "postea regis Edgari diebus sub abbate Elfrico aedificata"[2]—this Elfric being a well-known builder—in his "Gesta pontificum Anglorum" he ascribes it instead to the efforts of Aldhelm. Richard of Cirencester[3] says it was built by Elfric, and repeats William's words. In any case, the church was still standing in William's days (he seems to have died about 1143): "Nam tota maioris ecclesiae fabrica celebris et illibata nostro quoque perstitit aevo."[4]

Further, there is no documentary evidence as to the precise date of its rebuilding

[1] Greenwell, *Durham Cathedral.*
[2] *Rolls Series—Gesta regum Anglorum.*
[3] *Rolls Series—Speculum historiae—De gestis regum Angliae.*
[4] *Rolls Series—Gesta pontificum Anglorum.*

Fig. 683.—Malmesbury Abbey Church. Carving from outer portal (XIIth Century).

in the XIIth century. Every probability, however, is in favour of the years which followed the death of William the historian; and the new construction may be connected with the independence recovered by the monastery in 1140, and the treaty which put an end to the civil war in 1153, for no small part of the struggles which disturbed the reign of Stephen (1135–1154) took place in the neighbourhood of Malmesbury, making it unlikely that while they lasted the monks would venture on an enterprise of this scale. As a matter of fact, all the characteristic features of the surviving parts of the building which have not been subjected to later alteration point to the third quarter of the XIIth century; and I do not think that there is any one with experience in such matters who can possibly fix upon any date but, approximately, the one suggested above (Fig. 682).

Fig. 684.—Malmesbury Abbey Church. Lunette in the porch (XIIth Century).

After this preface let us pass to the carving on the porch, as being the subject in which we are immediately interested.

The porch projects from the south aisle of the church, and its sides are decorated internally with arcading which has lost some of its members, and two sculptured lunettes. It is entered from the outside through a portal cased in a construction of the XIVth century. This portal is decorated with scroll work, interlaced lozenges, foliage, and other ornamental forms. But more important are the figure subjects (Fig. 683) on the

second, fourth, and sixth orders. From the description of these sculptures by an anonymous writer who visited the church in 1634, we learn that all the subjects (except a very few which had disappeared) were taken from the Old and New Testaments.[1] Some of those that are least decayed can still be identified.

Fig. 685.—Malmesbury Abbey Church. Inner door in porch (XIIth Century).

Each of the two lunettes (Fig. 684) on either side of the porch contains a group of six figures seated in a row on a bench, and undoubtedly representing the Apostolic College, with angels floating in the air above them. The Apostles, mostly bearded figures, are seated in various attitudes, looking some to the right and some to the left, or with the head resting on the shoulder, and have about them a certain air of solemnity. The mantles in which they are wrapped are draped in numerous folds which fall in various arrangements. The shapeless feet are the only part treated without distinction in a uniform, monotonous manner.

The doorway (Fig. 685) which leads into the church has the orders decorated with lozenges and branching scroll work. At the top they enclose a tympanum containing a figure of Christ in the act of blessing, seated in a vesica supported by two angels.

It appears to me that all these sculptures, treated without undercutting, are the production of one school and one date, though the work of three different hands. Thus, the decorative treatment of the two doorways is the creation of a single mind, but it is noticeable that on the outer one both ornaments and figures are modelled with higher artistic skill than those of the arch within. The carving of the two doorways must, then, be assigned to two distinct artists. Again, the drapery of the figures in the lunettes and tympanum is closely related, but, on the other hand, the figures in the latter are more artistic and better proportioned than those in the lunettes at the sides. These must accordingly be assigned to a different chisel.

Fig. 686.—Lincoln Cathedral. Carvings in the west front (XIIth Century).

We may remark at this point that all this carving, whether it consists of ornament or figures, is to be distinguished from that on the capitals in Archbishop Roger's (1154–1181) crypt in

[1] Brayley, *Graphic and historical illustrator—Topographical excursion.*

York Minster, belonging to the first years of his episcopate. The carving at York, consisting of scrolls, plants with pellets, palm leaves, intersecting arches, bunches of grapes, and eight men in tunics grasping a cable which runs below the abacus, are correct in drawing so far as regards the decorative motives, but the figures show no sense of proportion.

Fig. 687.—Lincoln Cathedral. Font (XIIth Century).

As we stand before the carvings of the porch at Malmesbury, forming a collection which, with the exception of the important reliefs on the west front of Lincoln Cathedral, is unrivalled among English XIIth century monuments, we cannot but regret that the relentless hand of time, the mischief wrought by man, and the quality of the stone employed, have combined to reduce so much of it to the mutilated and decayed condition in which we see it to-day. But in spite of this, it is of assistance in fixing the date of other works which have given rise to differences of opinion, and of these we will select a few of the best known.

Let us begin with the reliefs which decorate the west front of Lincoln Minster. Various views have been put forward by those who have studied the subject, and it has even been suggested, owing to the way in which they are inserted in the wall, that they belong to the Anglo-Saxon age and are not in their original place—ignoring the fact that this unsymmetrical decorative treatment of church fronts was not, during the Middle Ages, effected by the adaptation of sculptures brought from elsewhere, but was a regular form of decoration, reduced to a system by the Lombard gilds, who made their principal display of it in San Michele Maggiore at Pavia (XIIth century).

Fig. 688.—Winchester Cathedral. Font (XIIth Century).

The Lincoln sculptures, here and there renewed, are treated in bas-relief, and have sacred subjects (Fig. 686). The human figures are fairly proportioned and moulded, but generally stiff, awkward in their movements, and expressionless in feature, while the drapery is very rigid. The scene of the damned being carried off by devils, where the carving is untouched,

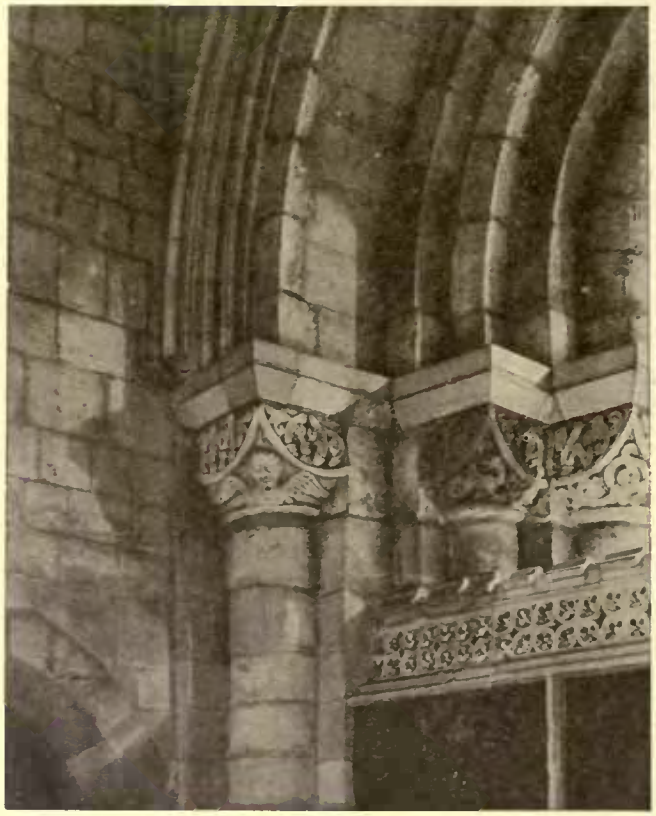


Fig. 689.—Worcester Cathedral. Chapel of St. John. Capitals (XIIth Century).

should be specially noticed. While these reliefs display an art considerably more advanced than that of the "storied" capitals at Southwell (1108–1114), it is less developed than that exhibited by the Apostles at Malmesbury, and the last years of Alexander's episcopate (1123–1148) suit them perfectly.

The black Tournai marble font in the nave (Fig. 687), recalling the one at Winchester (Fig. 688), is the product of another school of artists.

Let us pass to the so-called "Prior's Door" in Ely Cathedral. The jambs and the archivolts are enriched with scroll work, foliage, flowers, pellets, human beings, quadrupeds, birds, fishes, monsters, all treated with freedom, and in deep relief, though without undercutting. On the whole it shows a more skilful arrangement and better distribution of parts than any other specimen, with the exception of the porch at Malmesbury. The tympanum contains the figure of Christ blessing within a vesica held up by two angels. These figures are rather flat and not at all undercut, but the drapery is richer than that at Malmesbury, and the hair is treated more artistically. I think we shall not be far wrong if we place them in the first years of Bishop Geoffrey Ridel (1174–1189).

To the same period, that is to say, to the years subsequent to the fall of the central tower (1175), may be assigned the well-known carvings (where untouched) on the capitals in St. John's Chapel, opening out of the south arm of the main transept of Worcester Cathedral (Fig. 689). These carvings, consisting of scroll work, a winged dragon with a serpent's tail, and the winged head of an angel, exhibit an art obviously of the same period as that of the Ely doorway.

Next comes the door in the west front of Rochester Cathedral, reputed to be of the time of Henry I (1100–1135), but really later than the fire of 1179. Its decoration

Fig. 690.—Norwich Cathedral. Sculptured figure on north arm of transept (XIIth Century).

comprises foliage (sometimes treated with a flavour of the Pointed style), scroll work, the figure of Christ in a vesica held by two angels and surrounded by the emblems of the Evangelists, the figures of a king and a woman, human heads, and realistic or imaginary animal heads. All is well designed and modelled, treated with vigour, and sometimes completely undercut. The king in particular, though damaged, shows fine drapery and treatment. One would look in vain for carving of this character in England, not merely in the time of Henry I, but even at the beginning of the second half of the XIIth century.

Compared with that at Malmesbury the carving on the portal at Rochester shows advance both in the decorative parts and in the figures; the animals, too, are more successfully treated than those in the crypt at Canterbury, not to say those on the door at Ely. Moreover, the composition which fills the tympanum shows progress beyond the similar feature of the doors at Malmesbury and Ely, the latter being derived from the former. We shall be correct in placing it in the first years of the XIIIth century in the time of Bishop Gilbert de Glanville (1185–1214), when a good deal of work was carried out in the monastery at Rochester. We cannot accept the view of those who would see a foreign hand in the doorway on account of the absence of billets, for this detail is equally wanting on the doors at Ely and Malmesbury. The Anglo-Saxon artists had been roused from their traditional inertia by the Norman Conquest. The carvers, whom preference for the axe and the rarity of employment had rendered almost incapable of executing the finer work, were reinvigorated by the new artistic influence, and slowly but surely began to advance along the road of the revival which was stirring Western Europe. The figure in the act of blessing, to be seen on the outside of the north transept of Norwich Cathedral (Fig. 690), the "storied" capitals at Southwell, and the figure capitals at Tewkesbury, are so many stages on the road leading to the Lincoln reliefs, the capitals in Roger's crypt at York, and the sculptures at Malmesbury.

Fig. 691.—Chichester Cathedral (XIIth Century).

Earlier than the carving of the Rochester door is the less advanced work on the capitals of St. Peter's, Northampton. It consists of foliage, real or imaginary

Fig. 692.—Chichester Cathedral. Sculpture (XIIth Century).

Fig. 693.—Chichester Cathedral. Sculpture (XIIth Century).

creatures, pearls, birds, grapes, complicated interlacing, &c. The foundation of the church was about 1160:[1] the date 1190[2] must be that of the completion of the building.

Two works not much later than the Rochester door are the marble panels which were found concealed behind the choir stalls in the last century, and are now built into the wall of the south choir aisle of Chichester Cathedral (Fig. 691). This church was consecrated in 1108, severely damaged by fire in 1114, repaired by Bishop Ralph de Luffa (1091–1123), reconsecrated in 1184, injured again

[1] Parker, *An Introauction to the Study of Gothic Architecture.*

[2] Serjeantson, *A History of the Church of St. Peter, Northampton.*

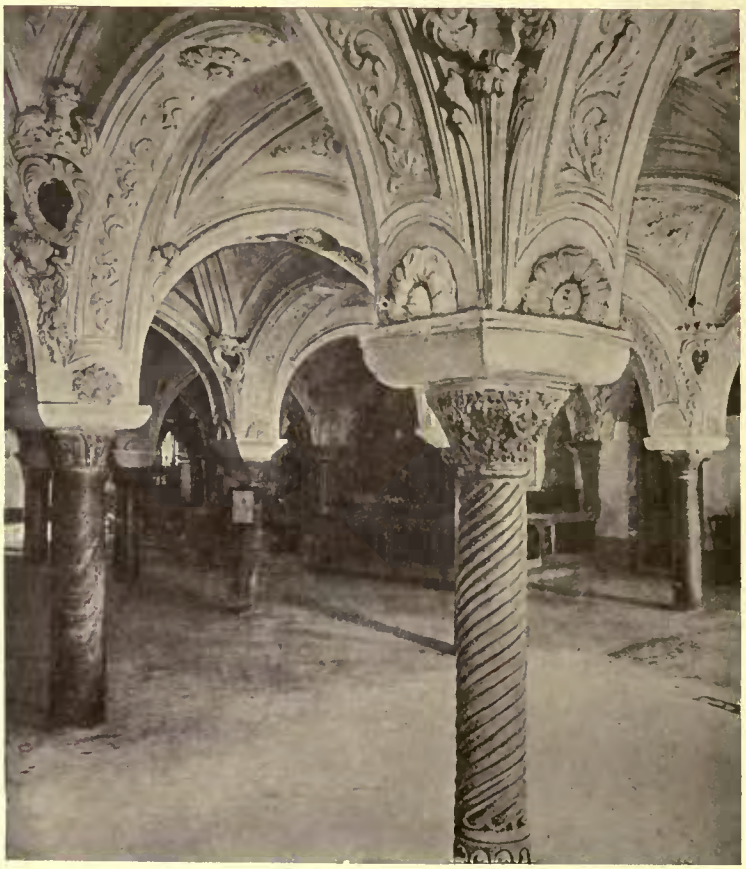


Fig. 694.—Bari. Crypt of San Nicola (XIth Century).

and still more seriously by the fire of 1187, and dedicated in 1199 under Bishop Seffride II (1180–1204) though the works of the second restoration were still in progress. The panels represent Jesus meeting Mary and Martha at Bethany, and the Raising of Lazarus (Figs. 692, 693). The treatment of the figures is superior to that of any which we have seen hitherto. The peculiar care and variety with which the hair and beards are treated should be noticed. The hands and faces, though not yet of the right proportions, are none the less executed with a certain naturalness. A peculiar feature are the cavities representing the eyeballs.

Fig. 695.—Canosa. Sepulchral chapel of Bohemond (XIIth Century).

Fig. 696.—Santa Maria Capua Vetere. Tomb called "La Conocchia."

These reliefs, together with the contemporary fragments discovered during the restoration of the Cathedral, in spite of the merits to which we have called attention, are immature both in composition and details, and therefore less advanced than the figures at Rochester. Accordingly, they will find their place in the last decade of the XIIth century during the episcopate of Seffride II. Many persons, it is true, believe that they came from Selsey, whence the see was moved to Chichester in 1075; and the latest dates allowed by them are the XIth century (and before 1075), or some time in the XIIth. The formless figure sculpture of that date in England refutes any such attribution.

All the reliefs which we have examined may be ascribed to English hands. The art of carving in the countries most likely to provide artists for such a purpose, viz. France and Italy, was at that time far more advanced than that exhibited by these sculptures.

A date later than that of the Rochester doorway must be assigned to the two well-known figures of angels built into the walls of St. Laurence's church, Bradford-

Fig. 697.—Athens. Choragic monument of Lysicrates (335 B.C.).

on-Avon. Their greater purity of line and freedom of movement show that they are later than the works which we have previously examined, though the execution is still rough. They might well belong to the early years of the XIIIth century if we found them in one of the more progressive artistic centres of England. But seeing that they are in an out-of-the-way locality, even though the monastery was connected with a rich and powerful abbey like Shaftesbury, it is impossible to date them within any but very uncertain limits, but in any case later than the XIIth century.

* * *

It has been supposed by some writers on these subjects that the Lombardo-Norman basilica was the model from which that found in the Norman conquests in South Italy and Sicily was derived. They even describe as "Norman" the style of the numerous churches erected in those lands in the XIth and XIIth centuries.

But, as a matter of fact, an examination of these edifices reveals, at the most, two occasional characteristics inspired by the Lombardo-Norman church, viz. the plan, and the intersecting arcading. None of the following features can be regarded as Norman importations.

(1) The somewhat sharply pointed roofs which occasionally occur, *e.g.* in San Nicola at Bari (1087–1098–1105). The form was not demanded by local climatic conditions, but depended on the aesthetic consideration of giving greater elegance to the outline of the gable by making it less depressed.

(2) The indication on the façade of the internal arrangement of the church. This idea, which originated at Ravenna, had been embodied as early as the VIth century in the church of Bagnacavallo.

(3) The Lombardic arrangement of supports alternately larger and smaller, exemplified in the nave of San Nicola. It had appeared as far back as 985 in SS. Felice e Fortunato, near Vicenza, and was of Roman origin.

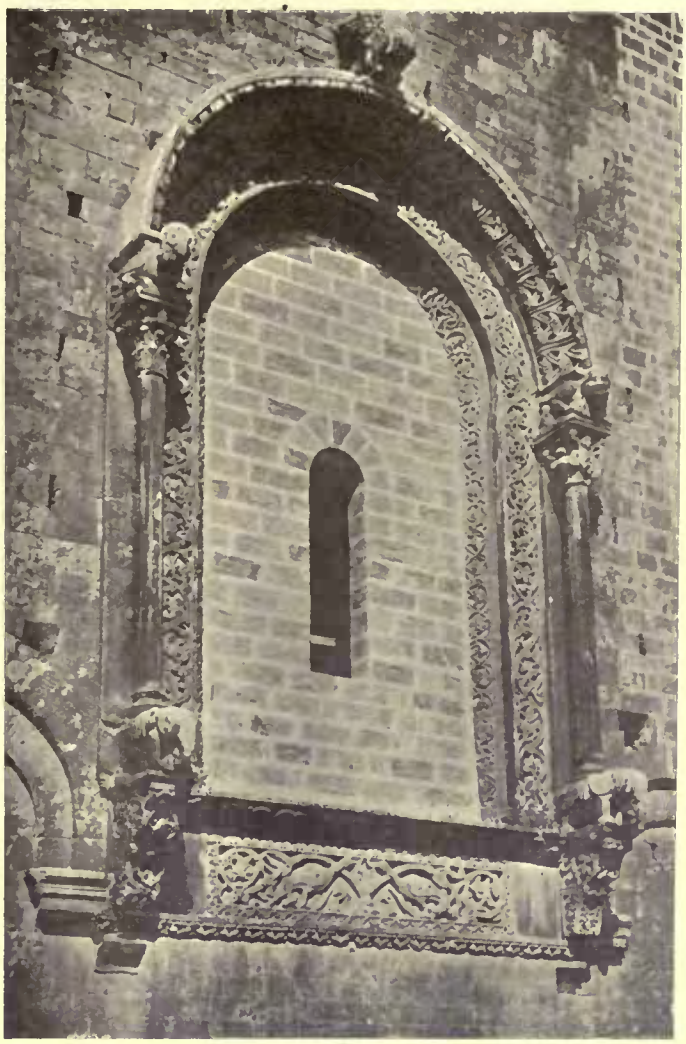


Fig. 698.—Bari. Cathedral. Window in the apse (XIIth Century).

(4) Bell-towers flanking the choir. We saw the origin of these in our account of the Duomo of Ivrea, and we shall learn more when we come to deal with the old cathedral of Cologne.

(5) The capitals, revealing influences of all kinds (Fig. 694)—Roman, Ravennate, Byzantine, Pre-Lombardic, Lombardic, Apulian, Calabrian, Campanian, Sicilian—everything except Norman. Unless, indeed, they are Roman, and brought from elsewhere; or of Byzantine origin, like the basket capitals with figures, probably of the VIth century, in the crypt of the XIIth century cathedral of Otranto.

(6) Cupolas having the drum of polygonal form externally, with engaged shafts

at the angles, as shown in the sepulchral chapel of Bohemond, Prince of Antioch († 1111), at Canosa (Fig. 695). This is a motive of Campanian origin. For instance, on the Via Appia outside Santa Maria Capua Vetere stands a Roman tomb popularly known as "La Conocchia" (Fig. 696), where the drum of the cupola has blank arches like large round-headed windows, separated by columns. Drums encircled on the outside by columns had been seen before this, *e.g.* the Choragic monument of Lysicrates (the "Lantern of Demosthenes") at Athens (335 B.C.) (Fig. 697), or the

Fig. 699.—Cefalù. Cathedral (XIIth Century).

tomb of the Gallo-Roman period at Saint Remy, where the open drum has a conical covering but has not got sham windows between the columns. The Byzantines did not introduce this feature before the XIth century. The drum of the cupola belonging to the convent church of Myrelaion at Constantinople (919–945) has still got only ordinary buttresses.

(7) The portal, which was a Lombardic creation, the prototype being that of Sant' Andrea at Montefiascone (about 1032).

(8) Windows made in the form of the Lombardic portal, of which such a fine example occurs in the cathedral of Bari (Fig. 698), erected after the destruction of the city (1156) by the troops of William I the Bad (1154–1166). The claim of the Lombardo-Apulian School to the authorship of this design cannot be denied.

(9) Rose windows, an Italian creation of the XIIth century. We noticed this point when describing the church at Vézelay and San Pietro at Toscanella.

(10) External arcaded galleries, which are of Lombardic origin, as we showed in our account of Sant' Ambrogio at Milan.

(11) The motive of several blank arches enclosed by a single arch, to be seen *e.g.* on the exterior of San Nicola at Bari. The idea of a large arch containing smaller ones had been applied by the builders of Ravenna as long ago as the Vth century in the interior of the baptistery of Neon.

Fig. 700.—Palermo. Cathedral (XIIth Century).

(12) Arched corbel courses. This form was known to the Romans, as we stated in our account of the chapel of San Pier Crisologo at Ravenna, and from them it descended to the Ravennate and Lombard gilds.

With regard to the plan of the Lombardo-Norman basilica, it was certainly taken as their model (with modifications) by the builders of the Duomo of Acerenza (1080), the second abbey church of the Trinità at Venosa (XIth century), the cathedral of Cefalù (Fig. 699) founded in 1131,[1] and that of Monreale the first stone of which was laid in 1174 in the reign of William II (1166–1189).[2] The radiating chapels which appear in some of these churches were not of Norman origin, for this arrangement originated in Touraine, where it was applied for the first time in Saint Martin at Tours in the first quarter of the XIth century.

There only remains to consider the characteristic intersecting blank arcading

[1] [2] Serradifalco, *Del duomo di Monreale.*

used for decorative purposes. The oldest dated specimen known to me occurs on the interior of the choir aisles in Durham Cathedral, begun in 1093. This was followed by the example in Norwich Cathedral where, before 1119, Herbert Losinga introduced the motive in the transept. Such churches must have been the source from which the creators of the cathedrals of Cefalù, Monreale, and Palermo (Fig. 700)—the last founded in 1185 by William the Good—derived the motive which they applied in such an elegant form to the exteriors of their buildings, unless, indeed, further discoveries give some support to the idea that the Sicilian craftsmen arrived at it independently under Moorish influence.

CHAPTER V

THE EARLY CHRISTIAN MONUMENTS OF IRELAND

THE following pages contain a summary of the results of a recent study of the early Christian architecture and sculpture of Ireland. I set them out here in the hope that they may contribute, in outline at least, towards a more rational classification of the interesting and characteristic mediaeval monuments of the island.

Let us begin with the sculptured crosses. One of the most celebrated is the wheel-head cross of Muredach (Fig. 701), as the name is given on one of its faces, in the churchyard at Monasterboice which contains three such monuments. Its carvings comprise religious subjects, representations of animals, panels filled with the cable pattern and intestinal interlacing, scroll work with birds pecking, studs, &c.

Fig. 701.—Monasterboice. Cross of Muredach (XIIth Century).*

To connect it with Muredach, abbot of Armagh, who died in 924,[1] is a complete mistake. The evidence of the large number of mediaeval carvings which I have seen and studied convinces me that in the Xth century there was no artist in existence, even the most celebrated of Italy, France, or Germany, capable of producing work of this kind, far surpassing, as it does, both in design and execution, the best results which these countries have to show right up to the close of the XIth century. It is equally impossible to ascribe it to an Eastern hand, for the Eastern sculptors of the Middle Ages did not produce squat figures of this type. On the

* The illustrations to this chapter (except Figs. 704 and 707) are from photographs kindly provided by the Dublin Museum.

[1] *Annals of the Kingdom of Ireland by the Four Masters.*

other hand, the representations on the Cross of Muredach of pairs of animals facing one another and holding some creature or bird between their paws are undoubtedly due to Lombardic influence. Now this motive, of Etruscan origin, did not make a start in Italy before the XIth century. The date of the cross must therefore be put at the beginning of the second half of the XIIth century. To the same period and school belongs the other and more imposing cross at Monasterboice (Fig 702), about 27 ft. high, wrongly assigned to the Xth century.[1]

Rather later is the remarkable tall and slender cross at Tuam (Fig. 703); for though the figure of Christ is flattened, the anatomy and the treatment of the beard show an advance over the best figures at Monasterboice. It was set up by O'Hoisin, that is to say, the famous Archbishop Aidan O'Hoisin (1150–1161),[2 3] whose period was distinguished by activity in building. It was then that the celebrated stone-built castle was erected at Tuam: "Rodericus O'Conner rex Conatiae castrum lapideum Tuamae construxit, quod tanquam novum et inusitatum apud Hibernos, *castri mirifici* nomine iis temporibus innotuit."[4] And to the same age belongs, if not the completion, at any rate the foundation or re-foundation, of the three churches consecrated on the occasion of the General Synod held at Tuam in 1172.[5]

Fig. 702.—Monasterboice. Cross (XIIth Century).

Of about the same date as the cross of Tuam is the small cross preserved in the chapel of St. Kevin at Glendalough. Three of its sides are covered with intestinal interlacing, and in front is a draped figure of Christ, of similar character to the one on the cross at Tuam. The less elaborate crosses at Clonmacnoise must also be put in the XIIth century.

To sum up, all these wheel-head crosses, a characteristic feature of which is the gabled structure, representing the Holy Sepulchre, by which they are crowned, and on which the Irish carvers seem to have concentrated all the artistic force

[1] Stokes, *Early Christian Art in Ireland.*
[2] O'Hanlon, *Lives of the Irish Saints.*
[3 4] Ware, *Hibernia sacra.*
[5] *Annals of the Four Masters.*

inspired by their religious enthusiasm, are later than the Norman conquest of England (1066). They are also subsequent to the time of Archbishops Lanfranc (1070–1089) and Anselm (1093–1109), when the Danish coast-towns of Ireland acknowledged the spiritual supremacy of Canterbury and Rome. Patrick, who in 1074 succeeded Donatus (Dunan) in the see of Dublin (1038–1074), was consecrated by the English primate in St. Paul's at London.[1] And from a passage in the "Annals of Loch Cé" we know that before 1134 the monastic rule settled by Rome had been enforced in the primatial see of Armagh (1134): "Imhar Ua hAedhagain, by whom the Regles of Paul and Peter at Ard-Macha was erected, died on his pilgrimage at Rome."[2]

They were the result of a national artistic revival produced by the renewal of relations with Western Europe after the long period of isolation in which Danish invasions and struggles, and disastrous internal conflicts, had plunged the unfortunate country. This revival, accordingly, was a reflex of the potent influence exercised by the art of Italy and by the Papacy, in the era following the epoch of 1000, on so many countries of both East and West. Not the least important agent in this movement was the learned Flann O'Gormain (1104–1174) who, after twenty-one years of study in France and Saxony, exercised for twenty consecutive years the supreme direction of the schools of Ireland.[3]

So far as carving is concerned this revival cannot have become effective till considerably after the beginning of the XIth century. The school of artists which in that century produced the barbarous capitals of the church of St. Flannan at Killaloe, built by King Brian Borumha (1002–1013), could never have executed the crosses which we have described. And, besides, the infantile geometrical incised ornament of Irish churches before the XIth century bears witness to the want of skill which characterized the school.

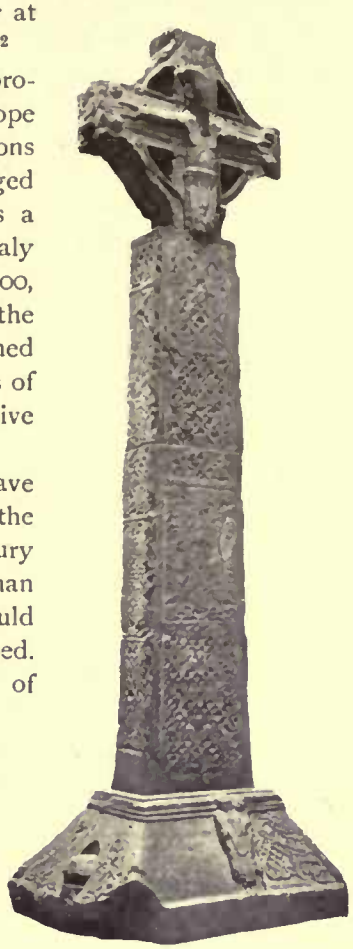


Fig. 703.—Tuam. Cross (XIIth Century). (*From a cast in the Dublin Museum.*)

Let us now turn to the buildings, beginning with the important ecclesiastical centre of Glendalough, the town of the Seven Churches. Among its ancient buildings the churches of the Rock, of Reefeart, of Our Lady, Trinity Church, the Cathedral and its tower, and the oratory and cell of St. Kevin, are believed to belong wholly or partially to the time of Kevin who died between 120 and 130 years old in 618.[4][5] Let us take them one by one.

I. Of the church of the Rock, said to be the oldest of Kevin's foundations, nothing is left but the scanty remains (restored) of an aisleless nave.

II. Of the little church of Reefeart, so called as being the burial place of the kings, or because King O'Toole († 1010) was interred there, there exist the ruins of the aisleless nave measuring about 30 ft. by 18 ft., with a rectangular chancel at the east, built of roughly-hewn stones of various sizes, and of rubble with a greal deal of mortar. This is thought to be the "clara cella" erected by Kevin and mentioned in

[1] Ware, *De Hibernia et antiquitatibus eius.*
[2] [3] *Rolls Series—The Annals of Loch Cé.*
[4] *Acta Sanctorum Hiberniae—Acta Sancti Caimgini.*
[5] *Rolls Series—Chronicum Scotorum.*

the following passages: "qui claram cellam Domino aedificavit," [1]—"clara illic cresceret cella, quc Desertum Caymginii appellatur." [2]

III. The Lady Church is represented by the remains of the nave and square chancel. The latter is the result of an alteration carried out when the building was dedicated to the Virgin, which, according to Petrie,[3] took place not before the XIIth century, because before that time no church in Ireland was dedicated to the Mother of God or to non-Irish saints. The round-headed window, decorated on the outside by a carved band springing from two heads, exactly suits the XIIth century. Its erection must have taken place after the fire of 1163.[4] On the same occasion the window with a hood mould was inserted in the south wall of the nave. The church is said to have been built by Kevin's orders, with the direction that he was to be buried in it; [5] but this is a mere tradition, and another points out an oratory or small chapel as his burial place.[6]

IV. Of Trinity Church we have the ruins of the nave and rectangular sanctuary, with a square porch once surmounted by a round tower. The oldest part is the nave. The chancel and porch are later additions.

V. Of the Cathedral there remain the ruins of the nave, considerably larger than that of any other of the Glendalough churches and about 30 ft. wide, and those of the chancel which is the result of an alteration probably carried out when the abbey of Glendalough was erected into a bishopric under Pope Alexander III (1159–1181).

Close by stands the ancient, picturesque, round tower. Both cathedral and tower are believed by Petrie [7] to have been erected by Gobhan Saer (about 610), on account of the analogies between them and the church and tower of Kilmacduagh which tradition ascribes to him.

VI. The two-storied Oratory of St. Kevin is preserved almost intact. In the course of time there were added to it the chancel, which has disappeared, and the round tower and sacristy which still exist.

VII. St. Kevin's Cell, believed to have been the first monastic cell erected by him, consists of the remains of a structure of bee-hive form.

In all these buildings the windows are narrow, and sometimes square-edged, but usually splayed on the inside. The doorways in some cases diminish in width towards the top. Those in the Cathedral and St. Kevin's Oratory have also a tympanum above them, while the one in the Lady Church has the opening framed, with a cross carved on the architrave.

In view of the almost uniform masonry of the roughly constructed walls, and the excessive poverty of the architectural decoration, confined as it is to two rude lunettes, and considering the almost entire absence of artistic ornament, consisting merely of a poor moulding round a door and a cross, the problem of fixing the date of these structures is by no means easy. We will, however, attempt to solve it, and we may begin by classifying them under three heads. To the first belong the churches of the Rock, of Reefeart, of Our Lady, the Trinity, and the Cathedral; all of them built of masonry, but without solid roofs. A second category is formed by the vaulted buildings, represented by the tower of the Cathedral and the Oratory of St. Kevin. Kevin's bee-hive cell forms a class by itself.

[1] *Acta Sanctorum—Tertia dies Junii.* [2] *Acta SS. Hiberniae—Acta S. Caimgini.*

[3] *The Transactions of the Royal Irish Academy*, Vol. XX.—*An inquiry into the origin and uses of the round towers of Ireland.*

[4] *Annals of the Four Masters.*

[5] *Antiquarian Handbook Series*, No. 1—*Dunsany, Tara, and Glendalough.*

[6] O'Hanlon, *ob. cit.* [7] *Op. cit.*

It appears to me that the monuments of the first class are the oldest, but still not so old as the time of St. Kevin. We have already seen that the churches erected in the "Celtic" or "Scottish" manner in England by the missionaries sent forth from Iona and Lindisfarne or its daughter monasteries were constructed of wood (it is even suggested that they may have been of osiers plastered with mud), and originally covered with reeds or thatch, and afterwards with lead. It was a style of building carried even to Italy by Columban, as the church of the Virgin at Bobbio showed. In Ireland the adoption of masonry in place of timber for ecclesiastical buildings must have been a consequence of the burnings due to the Danes who invaded the island from 794 onwards,[1] not to speak of those caused by the Irish themselves. It is true that the Annals of Ulster mention under the year 788 a stone chapel, to which Petrie refers.[2] It may have been merely a dry-stone structure of the bee-hive type. In any case one swallow does not make a summer. Inveterate customs are very reluctantly abandoned, and only under the stress of dire necessity.

The earliest record of Glendalough suffering from devastating fires at the hands of the Irish and Danes[3] occurs in the year 770. A similar calamity happened in 835.[4] From this we may infer that the sacred structures were in the interval hastily rebuilt of wood. It must have been only after the second destruction that it was decided to replace the timber construction by masonry, "iuxta Romanorum morem" as Bede describes it.[5] It was under these circumstances that the churches of the Rock, of Reefeart, Our Lady, the Trinity, and the Cathedral, may have been erected with stone walls and roofed with reeds or some kind of thatch. It was a form of construction which was an improvement on the use of wood only, for if it happened to be burned it was capable of being repaired, instead of requiring an entirely new erection. The Cathedral was, perhaps, somewhat different, as it may have possessed a timbered roof covered with sheets of lead, like the great church at Armagh which was also constructed of stone with a lead roof, and was burned with its bell-tower and bells in 1020.[6] As we have seen, this type of roof had been adopted for the cathedral of Lindisfarne between 687 and 697.

I have mentioned both systems of roofing because they are both "Celtic," and also because the gables of these Irish churches show no traces of a junction with a stone roof. And, in any case, the width of the cathedral forbade the construction of a solid covering. The annalists, moreover, confirm the theory that the Glendalough churches as a rule had neither vaulting nor stone roofs. Thus, in 835 the Danes burned the "oratorium," which must mean the monastery church. In 1020 they burned "the oratories." In 1061 the "churches" were accidentally consumed by fire, and again in 1084. And in 1163 the "House of Kevin" ("Cro-Chaeimhghin") was burned together with the "church of the two Sinchells."[7] This "House of Kevin" must have been the abbot's residence, for it is not conceivable that an ordinary dwelling, liable to be destroyed by fire, should have been preserved intact through all the series of disasters which befell Glendalough from 770 onwards.

This system of building in stone with a roof of combustible material remained in vogue. Thus we hear that in the XIth century—to be precise, in 1058 and 1060

[1] *Annals of the Four Masters.*
[2] *Op. cit.*
[3] [4] *Annals of the Four Masters.*
[5] *Vita abbatum.*
[6] *Rolls Series—The Annals of Loch Cé.*
[7] *Annals of the Four Masters.*

respectively—"Imlech-Ibhair was entirely burned, both stone church and steeple," and "Cenannus was altogether burned, together with its stone church."[1]

After the reign of Edward the Elder (901–925), when, as we noticed at the time, the efforts of the Anglo-Saxons against the Danes in England were accompanied by the construction of strongholds with towers as an effective method of successfully opposing the barbarians, and as an echo of the great building era in England which distinguished the reign of Edgar (959–975), and, perhaps too, in consequence of fresh disasters which befell Glendalough in 977, 982, 984, and 985, the erection of the cathedral tower must have taken place.

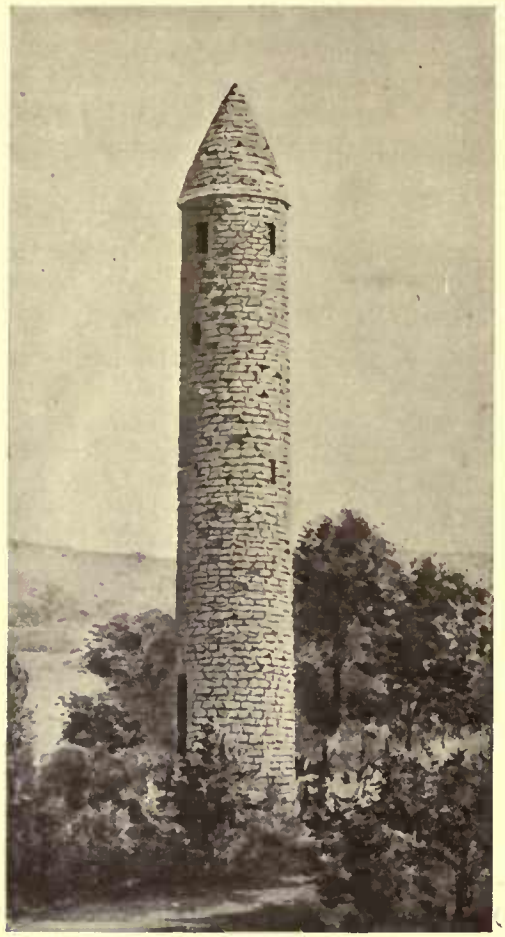


Fig. 704.—Glendalough. Cathedral. Round tower (Xth or XIth Century).

This tower (Fig. 704), which is some 100 ft. high from base to summit, constructed of roughly hewn stones of all sizes and rubble set in mortar, covered by a circular vault, and originally divided internally into floors, the holes for the beams being still visible all round, served for the various purposes of a bell-tower, an outlook, and a stronghold and place of refuge for the lives and property of the monastic body. This fact was first brought out by Petrie,[2] who is only mistaken in the date of this and similar Irish towers which he ascribed to the centuries between the Vth and XIIIth. That it was intended to hold the bells is shown by the four openings at the summit. The purpose of defence and refuge is indicated by the entrance being placed at the height of some yards above the ground. It was reached by a ladder. The existence of wooden floors inside is proved not only by the holes for the beams, but also by the fact that another tower, that of Telachaird, was burned in 1171 with all the unfortunate people who had taken refuge in it.[3]

The painful experience of the past was, no doubt, the convincing argument in favour of the adoption of this form of structure, impervious as it was to any attempt of an enemy to set it on fire. But I do not believe that it could have taken place until the Irish builders had obtained considerable practice in masonry construction, and had erected some vaulted buildings. The vault of the tower—and the tower is so solidly built that the wind was able to tear off the conical roof without damaging the rest—though forming a cupola on a circle of only about 8 ft. in diameter, must have demanded a Herculean effort of constructive science on their part. The difficulty arose from the fact that they were not accustomed to vaulting; and that,

[1] *Rolls Series—The Annals of Loch Cé.* [2] *Op. cit.*
[3] *Annals of the Four Masters.*

by making their chancels rectangular, they had avoided the constructive difficulties inherent in the circular form of apses and half-domes, requiring as they do specially prepared materials and a higher degree of skill.

The typical form of the Glendalough tower, related as it is to the bell-towers of Ravenna and also to the staircase towers with their conical cupolas in San Vitale, was undoubtedly an importation from Italy. If we could fix with certainty the date of the foundation of the Irish Colony at Poggio de' Berni in the district of Sant' Arcangelo (Forlì), which is described as "Podium Hibernorum" and said to be of ancient origin,[1] some interesting light might be thrown on this importation. In any case, Continental influence on Irish architecture from the Vth to the XVIIth century has been admitted, even by recent writers.[2]

Fig. 705.—Antrim. Round tower (Xth or XIth Century).

To about the same date as that at Glendalough belong the towers of Monasterboice and Antrim (Fig. 705). To a later period, but before the erection by Ua Maeleoin of the tower at Clonmacnoise (finished in 1124: its top was destroyed by lightning in 1135[3]), which has a finished facing and is built with regular courses of carefully laid oblong blocks of stone, will belong the round towers of Disert Aengus (Fig. 706), Scattery Island, and Station Island in Lough Derg, the masonry of which, though still rough, is more regular than that of the towers described above.

Fig. 706.—Disert Aengus. Round tower (XIth Century).

These round towers continued to be erected in Ireland for a long time. Thus, the one at Ardmore, about 108 ft. in height, built of oblong blocks of stone and with the exterior marked off into zones by stringcourses, is not older than the erection of the church, that is to say the end of the XIIth century.[4] This need not cause surprise, seeing that the Danes who had established themselves in Leinster before 851[5] were not finally annihilated till 1171, when the Anglo-Normans vanquished the fleet of Asgall and put him to death,[6] and that disastrous internal struggles had not ceased to rage in the island.

About the same date as the tower of Glendalough is the oratory of St. Kevin known as "St. Kevin's House" or "St. Kevin's Kitchen" (Fig. 707). This is a chamber

[1] Calindri, *Saggio statistico storico del Pontificio Stato.*
[2] A. S. Green, *The making of Ireland and its undoing.*
[3] *Annals of the Four Masters.*
[4] Dunraven, *Notes on Irish architecture.*
[5] Ware, *De Hibernia et antiquitatibus eius.*
[6] *Annals of the Four Masters.*

Fig. 707.—Glendalough. Oratory of St. Kevin (Xth or XIth Century).

(about 30 ft. × 21 ft.) of two stories, one of which has a barrel and the other a pointed-arched vault. The upper supports the gabled masonry roof, covered with stones which form a continuous structure with the vault. The walls are built of stones of all sizes and rubble set in mortar. To this chamber there was added later a rectangular chancel, now destroyed, flanked by a sacristy which survives. Over the west end rises a round bell-turret which breaks the vault of the roof. Three holes for the bell ropes are pierced in the barrel vault of the lower story.

This chamber was not built for the double purpose of an oratory below and a dwelling room above, as has been suggested. The opening now existing in the barrel vault, intended to form a communication between the two stories, is the result of an alteration. The upper vault, too, was not constructed to provide a tiny dwelling with a water-tight covering, but to carry the sloping sides of the heavy roof, and provide something to intercept the weight and take the pressure off the barrel vault below.

The constructive and statical knowledge here displayed—something quite exceptional among the builders of Ireland—with the object of making the structure as safe as possible from the assaults of time and the violence of man, points to workmen about contemporary with those who built the cathedral tower. The presence of a lunette over the west door (indicative of Pre-Lombardic influence), and the care taken to secure the building as far as possible from injury, suggest that it had a very sacred character, viz. that of an oratory erected on the site of the primitive wooden dwelling of the saint, which had perished by fire, thus con-

Fig. 708.—Kells. Oratory of St. Columba (Xth Century).

firming the popular title of "House" or "Kitchen of St. Kevin" which is believed to have its source in the ancient tradition that he lived there for the last years of his life.[1] At a later date the oratory was converted into a church. The saint's dwelling must have been the one erected in the monastery "of the valley of the two lakes," which was Kevin's last foundation: "Post hec venerabilis pater insignissimum monasterium, quod Vallis duorum stagnorum dicitur, illic construxit."[2]

Of the same type as this building is the well-known "St. Colum-Cilles House," *i.e.* the oratory of St. Columba, the apostle of the Scoti in Caledonia, who died in 597,[3] near Kells (Fig. 708). It, too, must have been built as an oratory, and earlier than the one at Glendalough, because the doorway is without a tympanum. These two buildings must be older than the equally well-known church of St. Flannan, standing close to Killaloe Cathedral which was erected by Donnell More O'Brien († 1194), king of Limerick.[4,5] The foundation of this church is ascribed to the year 1007 and the agency of Brian Borumha,[6] whose reign lasted from 1002 to 1013;[7] and its western door (Fig. 709), which has multiplied archivolts springing from two short jamb shafts surmounted by rude Corinthianesque capitals, shows an advance beyond the earlier doors at Kells and Glendalough. This doorway is, in its turn, a reflex of the Anglo-Saxon form of opening recessed in several orders.

Fig. 709.—Killaloe. Church of St. Flannan. West door (1007).

The type of these three structures was reproduced in the celebrated and singular Chapel of Cormac on the Rock of Cashel, built in the Lombardo-Norman style with a groundwork of Irish character (Figs. 710, 711). It has square towers flanking the east end of the aisleless nave, a rectangular chancel, from which projects an altar recess of the same form, and recessed openings of Lombardic type but Norman decoration. It has been said that it was the work of Cormac MacCullenan († 908); but it was really built by Cormac MacCarthy in 1127, and consecrated in 1134[8] or

[1] O'Hanlon, *op. cit.*
[2] *Acta SS. Hiberniae—Acta S. Caimgini.*
[3] Stokes, *Ireland and the Celtic Church* (revised by H. J. Lawlor).
[4] Dunraven, *op. ci.*
[5,6] Petrie, *op. cit.*
[7] *Annals of the Four Masters.*
[8] Petrie, *op. cit.*

Fig. 710.—Cashel. Chapel of Cormac (XIIth Century).

1130,[1] or, according to another account, in 1135.[2] The presence of the Lombardic cubical capital, which made its earliest appearance in 1013 in Sant' Abondio at Como, makes a Xth century date impossible. Moreover, the Lombardic openings, the enriched blank arcading of both interior and exterior, the figure corbels, and the quality of the vaulting of the ground floor, demonstrate undeniable Lombardo-Norman influence of considerably later date than 1066.

We have still to discuss the Cell of St. Kevin. Its date is not an easy problem to solve, but it must belong to a period subsequent to the first Danish invasions, for it is not likely that monastic cells were being built of masonry at a time when churches were constructed of wood.

In Ireland "bee-hive" structures start with the tomb chambers in tumuli, like those of New Grange, Dowth, and Knowth, the first being the finest.[3] [4] These are of circular plan and bee-hive section, constructed with rough dry-stone walling, which gradually converges so as to form the vault above. Others are found, of ancient date, constructed either with or without mortar, which served as oratories or dwellings. Bee-hive cells of very early date exist on Skellig Michael, one of which has formed a chapel. But they are not so old as is generally supposed. The first planting of this monastic colony on the Great Skellig was surely subsequent to St. Aubert's foundation of Mont Saint Michel (about 708), which in its turn was derived from San Michele on the Monte Gargano. The founder is said to have been the abbot St. Suibhneus, but we

Fig. 711.—Cashel. Chapel of Cormac XIIth Century).

[1] *Rolls Series—Chronicum Scotorum.*

[2] *Rolls Series—The Annals of Loch Cé.*

[3] *The Transactions of the Royal Irish Academy*, Vol. XXX.—Coffey, *On the tumuli and inscribed stones at New Grange, Dowth, and Knowth.*

[4] *Journal of the Royal Society of Antiquaries of Ireland*, Vols. IV., V., VI., VII.—Coffey, *The origin of pre-historic ornament in Ireland.*

do not know his date.[1] Destroyed in 812 by the Danes, who starved the monks to death, it was rebuilt in 860. Subsequently, an abbot, Flann MacCellac († 885), is recorded. The date of the removal of the house to Ballineskellig is not known.[2] In any case, the oldest structures of Skellig Michael are later than the rebuilding of 860. Their form is to be explained by the fact that it was easier for the monks to procure stone than timber.

Fig. 712.—Gallerus. Oratory (IXth or Xth Century).

Of the same type is the well-known Oratory of Gallerus (Fig. 712), entirely constructed without mortar, and with the vault almost resting on the ground. Its date is not known, but the greater skill displayed shows that it is later than the structures on the Great Skellig. Perhaps it belongs to the end of the IXth century, or the first half of the Xth ; but it is certainly not of the age preceding the apostolate of St. Patrick (432–461),[3] as Petrie[4] imagined. The method of construction may well be due to the difficulty of procuring mortar, and reasons of economy.

Later than the type of building represented by the oratory of Gallerus is the one exemplified by the chapel on St. Macdara's Island, in which the low side walls of the nave, projecting beyond the line of the front and end, originally carried a high-pitched stone roof, the junction of which with the gables may still be traced. For it was one thing to raise a converging vault from the firm ground, and quite another matter to cover a space with a heavy roof of masonry high up.

Fig. 713.—Kilmachedar Church (XIth or XIIth Century).

From a combination of these two types was evolved a third, viz. that with two vaulted stories, the earliest examples being the oratories of Kells, Glendalough, and the church at Killaloe. This type, together with that of St. Macdara's oratory, appearing in a perfected form in Kilmachedar Church (Fig. 713), went on being improved through the XIth and XIIth centuries.

Before leaving the subject of Ireland I may notice that the crypt of Christ

[1] [2] Archdall, *Monasticon Hibernicum.* [3] Bury, *op. cit.* [4] *Op. cit.*

Church (Trinity) Cathedral, Dublin, is thought to represent with its vaulted construction (though its form has been changed) the original church founded by King Sihtric († 1041 or 1042) and the first (Danish) bishop, Donatus or Dunan (1038–1074), about the year 1038, or that, at any rate, it preserves the exact plan of that erection. This idea is based on a passage of the "Liber niger" of Christ Church: "Sitricus . . . dedit S. Trinitati et Donato primo episcopo Dublin(ensi) locum ad aedificandum ecclesiam S. Trinitatis, ubi fornices sive voltae sunt fundatae."[1][2][3]

An examination of the structure has convinced me that the remodelled crypt is the result of the rebuilding of the church carried out about 1170 in the time of Strongbow and Archbishop Laurence O'Toole (1162–1180). In the first half of the XIth century no church of this size and form could have been erected in Dublin. Neither the Danes in Ireland, nor the Irish themselves, accustomed as they were to ecclesiastical buildings of quite another type, and to the erection of structures of very modest dimensions, would have been capable of performing the task. Nor, for that matter, would English builders of the time have been in any better position. And there is no record that Sihtric during his pilgrimages to Rome in 1030 and 1035[4] engaged the services of Italian workmen capable of carrying out his intentions. Nor could the constructive skill then to be found in Normandy, thanks to William of Volpiano and his pupils, have been utilized for the occasion, for it is out of the question to suppose that the Benedictines would have placed their services at the disposal of Bishop Dunan who had handed over his cathedral to secular canons.

[1] Archdall, *op. cit.*
[2] Ware, *Hibernia sacra.*
[3] Ware, *De Hibernia et antiquitatibus eius.*
[4] Archdall, *op. cit.*

CHAPTER VI

THE ECCLESIASTICAL ARCHITECTURE OF GERMANY

FROM CONSTANTINE TO THE ELEVENTH CENTURY

IN the lands comprised within the German Empire of to-day the list of surviving churches belonging to the centuries between Constantine's grant of peace to the Christians (313) and the fatal catastrophe of the Roman Empire, long tottering under the weight of its own greatness and its inherent vices, and from that gigantic upheaval down to the reign of Charles the Great (768–814), is confined to a single building, the cathedral of Trier, and that not in its original condition. Moreover, it was never a structure erected as a whole for its purpose, being merely the result, in the first instance of an adaptation, and then of a restoration.

THE CATHEDRAL OF TRIER was formed by Agricius (who, according to Gams,[1] held the see from 314 to 332) in the hall of a Roman building supported by four lofty columns united by arches, which he dedicated to St. Peter. This adaptation of a building of no great size, instead of the erection of a spacious basilica, must, considering the importance of Trier, have been due to the fact stated by Harnack[2] that at the beginning of the IVth century the number of members of the local church was still small. The cathedral was damaged by the Franks, and restored by Bishop Nicetius (527–535–566).[3][4]

Fig. 714.—Trier. Cathedral. Roman work on north side (IVth Century).

On the north side of the church some remains of the Roman building may be

[1] *Op. cit.* [2] *Op. cit.* [3] *Mon. Germ. hist.—Gesta Treverorum.*
[4] Browerus, *Antiquitates et Annales Trevirenses.*

seen (Fig. 714). The construction is of stone with courses of brick, and there may be noticed a continuous band of tiles which follows the line of the alternate

Fig. 715.—Trier. Remains of Imperial Palace (1Vth Century).

triangular and rounded heads of the niches and openings on the ground floor of the building. It looks as if it were intended to break the plainness of the wall, which is quite devoid of ornaments in relief. The structure may be assigned to the times of Diocletian (284–305), Maximian (286–310), and Constantine (306–337), the period of the city's greatest splendour;[1] or, more probably, to the reign of the last, and not long before its conversion into a church by Agricius. It certainly is not as late as the year 370, as Dehio and Von Bezold[2] and others imagine; for that date conflicts with the account in the "Gesta Trevererorum," and its masonry is evidently contemporary with that of the three-lobed structure belonging to the Imperial Palace (Fig. 715). This is also faced with bands of stone alternating with bands of brick, and is ascribed to the age of Constantine; rightly, I think, on account of the window arches which, though they have not the comparative finish of the time of Diocletian, show no signs of the marked decadence of the post-Constantinian epoch.

Fig. 716.—Trier. Cathedral. Capital (VIth Century).

The recent restoration has thrown light on the original construction of the interior of the cathedral, where the round arches are outlined by a ring of bricks laid horizontally, whereas those belonging to the adaptation are copied from the old ones, but without the ring of bricks.

To the alterations of Nicetius belong two capitals (Fig. 716), now built into the wall, which formerly surmounted two of the four supports of the central quadrangular space. They are imitations of the antique, of Corinthian pattern, with plain, stiff leaves, and are rude and poor work. They would be of interest if they were made on the spot, as providing evidence about the state of

[1] Browerus, *Antiquitates et Annales Trevirenses.* [2] *Op. cit.*

carving in the VIth century in an important artistic centre such as Trier was under Roman rule, and as showing the type of capital in vogue there at the time. But as we know from a letter of Ruffus, bishop of Turin (560–570), to Nicetius that the latter invited craftsmen from Italy to repair the damage inflicted on the churches of Trier by the barbarians (". . . artifices de partibus Italiae accitos . . . ad vos, Domino ducente, transmisi"[1]), probably it is they who are responsible for these capitals.

* * *

We have already given a brief sketch of the ecclesiastical architecture of the Frankish Empire under Charles the Great in Italy, Dalmatia, and France. We will now extend our survey to the German lands, beginning with the most celebrated of the Carolingian buildings, the palace chapel of Aachen. The restoration in progress has made it possible for me to examine it stripped of all accretions, and to penetrate the inmost secrets of its organic structure.

Fig. 717.—Aachen. Palace Chapel (796–804).

THE PALACE CHAPEL AT AACHEN was erected by Charles the Great between 796 and 804, and dedicated to the Virgin by Pope Leo III early in 805.[2][3][4] The plan is that of a polygon with sixteen sides, four of which are taken up by the sanctuary, the narthex, and the staircase towers. On the ground floor the arches, strengthened by substantial sub-arches, which open out of the central space (Fig. 717) are carried on piers of broken outline, recalling (in section) that of the piers in San Vitale at Ravenna, which, in their turn, present a striking analogy to

[1] *Mon. Germ. hist.—Epistolae Merowingici et Karolini aevi.*
[2] *Mon. Germ. hist.—Einhardus, Vita Karoli imperatoris.*
[3] *Mon. Germ. hist.—Annales Tielenses.*
[4] Jaffé, *Regesta pontificum Romanorum.*

Fig. 718.—Aachen. Palace Chapel. Vaulting of aisle (796–804).

others of the Roman period, *e.g.* those of an octagonal building near Pozzuoli, the plan of which has been preserved by Montano.[1] These arches, together with the blank wall-arches resting on powerful wall-piers (which have no buttresses corresponding to them outside, the outer face of the walls being unbroken, and the walls themselves over 5 ft. thick) sustain a continuous series of unraised tripartite and quadripartite cross vaults, some 2 ft. 4 in. thick at the crown (Fig. 718).

This system of thrusts met by the outer walls, strengthened on the inside by pilasters or even columns (either engaged or set against the wall) is sometimes described as "Byzantine." As a matter of fact the Byzantines borrowed it from the Rome of the first three centuries of the Empire. The city and its environs still contain the proofs of this for any one who cares to ascertain the facts, in the shape of tombs, the Thermae, the Basilica Nova or Basilica of Constantine (310–312), not to speak of the abundant evidence provided by old drawings.

The original presbytery was in two stories, and of rectangular plan. Two spiral staircases, formed in the towers which flanked the narthex and Imperial tribune, lead to the latter, the gallery, and the corridor communicating with the Imperial Palace. These staircases have rude vaulting, and terminate at the height of the roof, and below the raised part of the wall, in a round vault as in San Vitale at Ravenna. Of the same kind, but only intended to provide access to the roof, were the two staircase towers, circular after the Ravennate type, in the front of the abbey church of St. Gall. The tribune is of rectangular shape with a rounded end, and has a barrel vault constructed, like the walls, and, indeed, the whole of the interior facing of the building, of dressed stone brought from Verdun ("De quadratis autem lapidibus dirutae civitatis [Virdunicae] Aquisgrani capella extructa est"[2]). The jambs of

Fig. 719.—Aachen. Palace Chapel. Vaulting in the gallery (796–804).

[1] *Op. cit.*

[2] Bouquet, *Rerum Gallicarum et Francicarum scriptores—Ex chronico Virdunensi, auctore Hugone abbate Flaviniacensi.*

the two doors leading into it have long and short work, while the voussoirs of the arch are of white and grey stone alternately. Two low doors lead into the gallery.

When discussing Saint Bénigne at Dijon (1002–1018) we remarked that the Eastern origin ascribed by so many writers to galleried basilicas is quite arbitrary.

The arches of the gallery are carried by piers of the same form as those below Each arch contains a screen of two tiers of columns, which are not original. Of all the old capitals belonging to the gallery and tribune (derived from earlier buildings like the columns themselves: "Ad cuius structuram cum columnas et marmora aliunde habere non posset, Roma atque Ravenna devehenda curavit"[1]) there survive in the whole gallery only three of Corinthian form and late Roman date; and they have been restored. The idea of filling up the arch openings with screens of isolated columns is of Roman origin. It appeared frequently in the Thermae of Rome under the Empire.

Fig. 720.—Aachen. Palace Chapel (796–804).

From the piers and the pilasters of the outer walls, which are about 3 ft. 3 in. in thickness, spring rude visible transverse arches with voussoirs of various kinds of stone brought from elsewhere, like all the arches in the building. Upon these arches are turned barrel vaults alternating with vault cells (Fig. 719). These vaults, like those of the ground floor, the staircases, the Imperial tribune, and the dome, are roughly and coarsely constructed of pieces of limestone set radiating, with above them a bed of concrete composed of lime, sand, gravel, and pounded bricks, of the kind used at Rome and Ravenna.

The two original windows exposed by the restoration are round-headed and splayed on the inside, where the jambs have the long and short work which we

[1] *Mon. Germ. hist.—Einhardus, Vita Karoli imperatoris.*

noticed in the entrances to the tribune, and also to be seen in the original openings of the staircase towers. Whence we may reasonably infer that all or most of the openings of the rotunda were constructed on the inside in just the same way.

Above the arches of the gallery rises the octagonal drum, and upon that the cupola of the same shape. It is conical in form, about 3 ft. 3 in. thick at the crown and originally covered by a roof which, with the walls of the drum, was raised in height in the XIIIth century. The blank arcading of this addition has spurred bases to the shafts. Perhaps these were the source of the erroneous statement (for which the study of books instead of the monuments themselves is responsible) that this detail first appeared on bases in Roman times, and next in the rotunda of Aachen. As a matter of fact, its creation is not earlier than the Xth century.

Fig. 721.—Aachen. Palace Chapel. Façade (796–804).

Unlike the lower octagon the drum (Fig. 720) is strengthened close to the salient angles of the exterior, and almost up to its summit, by buttresses surmounted by capitals rudely carved with foliage. This device must have been chosen in preference to angle buttresses, with the object of increasing the field of resistance.

The rotunda was approached through a large cloister court or quadriporticus, remains of the foundations of which have been discovered.[1] On the north side of the great frontal recess or niche (Fig. 721) there remains one of the original windows of the barrel vaulted corridor which connected the gallery of the rotunda with the Imperial residence. The architrave of the lunette of this window is supported by an ill-formed fluted pier with moulded base and capital, the outer face of which has now been turned inwards, and the present outer one has been re-worked.

The Minster of Aachen as a whole is not so much an original creation

[1] Buchkremer, *Zur Wiederherstellung des Aachner Münsters.*

as an imitation of San Vitale at Ravenna, an edifice which Charles had had an opportunity of admiring during his visit to the city in 787.[1] It belonged to a style which, though it had obtained recognition in Italy, at Ravenna and Milan, had encountered an obstacle to its wider acceptance in the shape of the ancient basilica plan on which the Latin Church had set the seal of its approval. We therefore cannot imagine that the Emperor, who was surely not unaware of the reasons which had hitherto prevented the spread of the Byzantino-Ravennate

Fig. 722.—Constantinople. St. Irene (VIIIth Century).

style in Italy, though still the most civilized country of Western Europe, and containing the powerful building gild of the Comacini as well as the ancient and still fairly active school of craftsmen at Ravenna, would have cherished the vain hope, as some believe, that the erection of a building in that style would produce throughout the vast Frankish Empire, as if by a touch of a magic wand, craftsmen with the skill to develop and diffuse a type of construction so contrary to the artistic traditions both of its inhabitants and of the Latin Church of which, willing or unwilling, they were the faithful adherents.

The fact is, this style, in which the vault is applied only to ground plans

[1] *Mon. Germ. hist.—Agnelli liber pontificalis.*

of a certain form, the principal being the circle, the square, and the polygon, and of which the primary source is the dome, was not successful, or very rarely so, in gaining a footing in Italy and Northern Europe. And when in the XIth century a new age demanded a new style of architecture, it was neither the Byzantino-Ravennate, nor the Byzantine style pure and simple, which presented itself as best suited to the tastes and needs of Western Europe, but the Lombardic, born in the West, originating in the application of the vault to the Latin basilica, created by the gilds of Lombardy, and fashioned by the Benedictine Order into the forms which we find in the countries north of the Alps.

No information has reached us as to the architect of this celebrated church

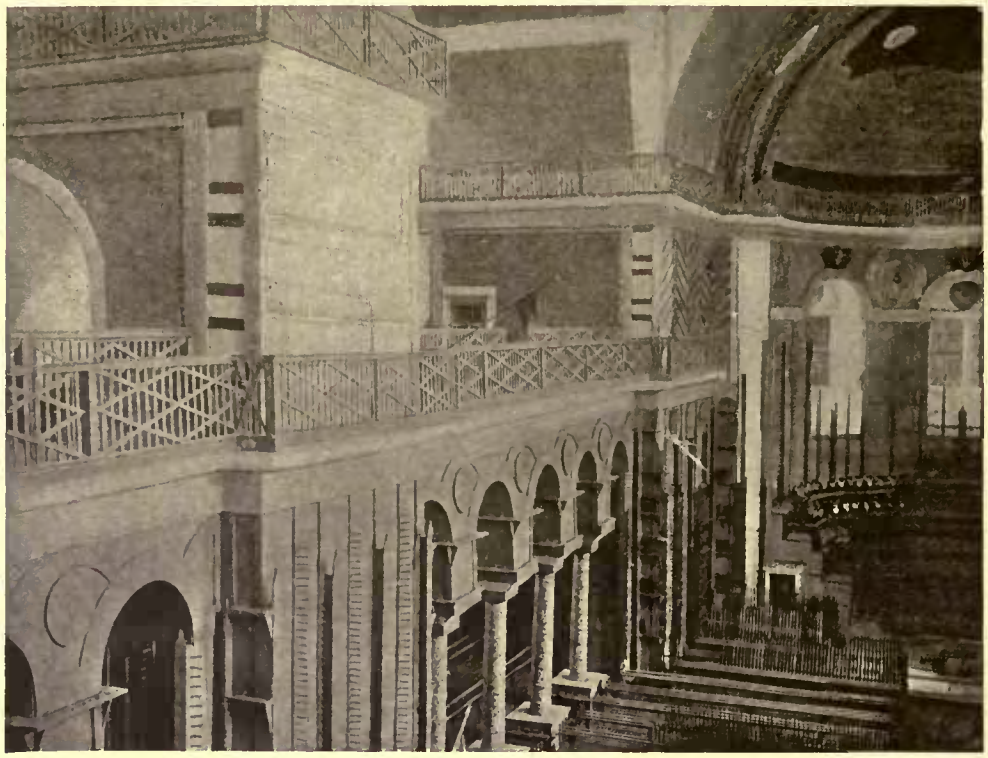


Fig 723.—Constantinople. St. Irene (VIIIth Century).

or the builders who worked under him. But there are grounds for believing that it was erected from the designs and under the superintendence of Byzantine architects, and carried out by Italian masons assisted by Frankish workmen.

The Byzantine School is revealed in the statical principles exhibited by the structure, and also by the heaviness of the internal construction, the latter being a characteristic feature of Byzantine churches of the VIIIth century. This may be seen from St. Irene at Constantinople (Figs. 722, 723), which is not the church rebuilt by Justinian I (527–565), but a reconstruction begun by Leo III the Isaurian (717–740), after its destruction by the earthquake of 739;[1 2 3] not a mere restoration as is generally believed. I have formed this conclusion after making under great difficulties, a thorough examination of the building. The Ionic capitals with pulvins belonging to the eight columns which support the galleries under the

[1] Du Cange, *Historia Byzantina—Constantinopolis Christiana.*

[2] Van Millingen, *Constantinople.*

[3] Bury, *A History of the later Roman Empire.*

dome, are poor work and certainly not of the age of Justinian. Further, it is enough to look at the cupola, not lighted by small windows like St. Sophia and SS. Sergius and Bacchus at Constantinople, and not springing from a low drum like that of St. Mary Diaconissa in the same place, built by the patriarch Cyriacus in the reign of the Emperor Maurice (582–602),[1] but rising from a high drum, strengthened by buttresses outside, and lighted by lofty and wide windows like those in the Nymphaeum of the Licinian Gardens (253–268) and the Imperial Mausoleum (Vth century) by St. Peter's at Rome.

With regard to the actual masons, we know that, of all the countries then subject to the rule of Charles the Great, Italy was the most capable of providing them. The guard-house of Theodoric's palace at Ravenna (VIIIth century), and especially Santa Maria in Valle at Cividale (762–776), are convincing evidence of the capacity of the builders of Ravenna in the VIIIth century. And again, the structures erected in the Lombard part of Italy in the course of that century by the hands of the Comacine masters, as well as the fact that Hadrian I asked Charles the Great to send him a master mason (". . . prius nobis unum dirigite magistrum "[2]) to renew the timbered roof of the Vatican Basilica, are so many testimonies to the ability in matters of construction of the members of the gilds.

We may suppose that the " master " referred to was one of the Comacini, seeing that, during the period of great constructive activity which comprised the pontificates of Hadrian I (772–795) and Leo III (795–816), the Lombard gilds left undoubted traces of their presence both in Rome and in other towns of the Roman Duchy as it existed in the time of Charles the Great. Another consideration is the fact that the gilds in question were better known than any others among the Emperor's subjects.

Nevertheless, the Ravennate and Comacine craftsmen, with few exceptions and those of early date, familiar only with the easy field of the old Roman basilica design, cannot but have been dismayed when brought face to face with the problems of scientific construction, and with the practical task of building a vaulted structure of the type of the Imperial chapel. It is a reasonable inference that the direction of the work was not entrusted to any of these master masons, though at the same time it is natural that their services should be engaged for its execution (with the assistance of Frankish workmen for the simpler parts), whereby the great expense of hiring Byzantine craftsmen, as some think was the case, would be avoided. That masons of Ravenna did take part in the work is shown by the use of mortar of the Roman and Ravennate kind. On the other hand, the long and short work in the openings reveals the share of Frankish workmen, who, as we saw in our account of St. Peter's, Monkwearmouth (675), were responsible for its introduction into England. The fact that the dome was covered by a timbered roof makes the presence of Eastern builders doubtful, and rather points to those of Ravenna, whose predecessors had treated the cupola of San Vitale in the same way.

This employment of Italian workmen on the largest and most perfect of Charles's buildings, though it had not the marked direct effect on the Lombardic and derived styles that has been often attributed to it, still exercised an influence which, though indirect, was considerable. In the course of its erection the Comacine masters gained a familiarity with vaulting construction such as they had never been able to do before. On their return home, fortified by the lessons they had learned and the experience

[1] Du Cange, *Historia Byzantina—Constantinopolis Christiana.*

[2] Duchesne, *Historiae Francorum scriptores—Epistolae summorum pontificum ad principes et reges Francorum.*

they had acquired, after some further practice, in co-operation with the masters of Ravenna, in buildings of this type on the coast of Dalmatia, they devoted themselves to the researches and experiments which resulted in the creation of the Lombardic vaulted basilica.

Strzygowski[1] believes that Charles the Great's church followed Eastern models then to be found in the Gallo-Frankish lands. Having made it my practice to base my opinions on the evidence of wholly or partially existing buildings, or of those which have come down to us through drawings or descriptions, I regret that I am unable to accept this hypothesis. And I can only hope that German scholars, devoted as they are to facts, will not blame me for so doing. The Gallo-Frankish countries contain no such types. Unless, indeed, we were to make the mistake of regarding as one the three-lobed vaulted Roman structure at Trier, the similarity of whose plan with that of a hall in Hadrian's Villa at Tivoli (125–135) has been already pointed out.[2] It belongs to a type of vaulted construction absolutely unconnected with a Hellenic-Oriental origin, and essentially Roman. As a matter of fact the East, so far as is known, does not contain a single example of this kind of building earlier than the age of Hadrian. Whereas instances of these three-lobed structures, sometimes provided with external buttresses, can be found in the works of Montano,[3] Bramantino,[4] Serlio,[5] and among the drawings in the Uffizi at Florence. In the same way, the East was not the birthplace of the circular buildings with annular vaulted aisles, which we discussed in connection with the Holy Sepulchre.

It is usually thought that Einhard designed and carried out the most important of Charles the Great's buildings, from the palaces of Ingelheim and Aachen to the wooden bridge at Mainz, reaching their culmination in the rotunda of Aachen. This idea has been universally accepted, based as it was on the authority of Mabillon (1632–1707)[6]; and its truth was investigated only by a few, among whom were Pertz,[7] Springer,[8] Dohme,[9] and Delisle,[10] for almost every writer on Carolingian art has simply taken it for granted without verification. As it seems to require correction I will investigate it in my turn, though well aware how difficult it is to get new ideas accepted when the attempt involves the displacement of old ones.

About Einhard we know that he was brought up in the palace school, that he held the offices of royal steward or treasurer and of Crown notary, and that Charles the Great sent him (806) on a mission to Leo III (795–816) in order to obtain the Pope's assent to the act of partition of his dominions among his sons.[11] There is no documentary evidence to prove that he was also an architect. It is one thing to be Minister or Treasurer of the Household ("qui regalium aedificiorum praefectus erat"[12] —"operum regalium exactor constitutus"[13]), and quite another matter to be the architect of the royal buildings. It requires a strong effort of the imagination to interpret the words of the epitaph composed by Hrabanus Maurus,[14]

Quem Carolus princeps propria nutrivit in aula,
per quem et confecit multa satis opera,

and

ac multis arte fuit utilis

[1] *Der Dom zu Aachen und seine Entstellung.* [2] Dehio and Von Bezold, *op. cit.*
[3] *Op. cit.* [4] *Op. cit.* [5] *Op. cit.* [6] *Annales Ord. S. Benedicti.*
[7] *Einhardus, Vita Karoli imperatoris.* [8] *De artificibus monachis et laicis medii aevi.*
[9] *Kunst und Künstler Deutschlands und der Niederlande bis gegen die Mitte des Achtzehnten Jahrhunderts.*
[10] *De Eginhardo Caroli Magni notario.* [11] [12] Mabillon, *Annales Ord. S. Benedicti.*
[13] *Mon. Germ. hist.—Einhardus, Vita Karoli imperatoris.*
[14] Migne, *Patr. Lat.*, Vol. 112—*Epitaphium Einhardi.*

as referring to any duties of Einhard as architect and superintendent of the Imperial buildings. Nor can such duties be any better inferred from the passage in the Fontanelle (Saint Wandrille) Chronicle: "Heinhardo abbate viro undecunque doctissimo,"[1] or from Alcuin's well-known letter to Charles,[2] or Einhard's to his own son Vussinus.[3] The notice from Fulda of the sending to Einhard by Abbot Ratger of Brun Candidus "variarum artium doctorem peritissimum,"[4] tells us no more, for the latter was a painter and a man of letters, but not an architect. Again, even if we make the language of Walahfrid Strabus's flowery eulogy on Einhard

Beseleel fabre primum qui percipit omne
artificum praecautus opus[5]

mean that he superintended the workmen engaged on the Imperial buildings, there is nothing about his having designed them, and in particular the famous rotunda.

Nor is it any good to say, as Dohme does, that, as the plans and the construction of the chapel at Aachen demanded exceptional mathematical knowledge on the part of the architect, Einhard must have been the architect because Alcuin tells us that he possessed such knowledge. In the West, during the Dark Ages, vaulted buildings were not designed or erected on the basis of calculations, but on a ground-work of experience, by means of community of efforts, with the help of traditions of construction, and of the study of buildings surviving from the ancient world. Such are the conclusions at which I have arrived, and I have only been confirmed in them during my laborious researches into the subject of the experiments made for the gradual evolution of the Lombardic vaulted basilica by the most important of the mediaeval gilds, I mean the Comacine or Lombard corporations.

Now what traditions and what experience in the art of building did Einhard possess, when, at the age of twenty-five (Dohme and Springer date his birth approximately in 770; Pertz at the end of Pippin's reign [752–768] or the beginning of that of Charles the Great [768–814]), he took in hand the design, and in 796 the execution, of the most celebrated edifice of that age either in East or West? Those tasks demanded not only a study of its original, San Vitale (a filiation noticed long ago by Hübsch[6]), by one who was familiar with the problem, but also profound technical and statical knowledge which is not acquired off-hand. My answer is that he had none. It is true that Adhemar tells us that after the conquest of Lombardy (774), Charles brought from Italy singers and organists, as well as accomplished teachers of grammar and arithmetic or calculation, of whom there was a deficiency in his own country: "Ante ipsum enim dominum regem Karolum in Gallia nullum studium fuit liberalium artium."[7] In this way Einhard, after he had grown up, had an opportunity of devoting himself to the study of these subjects, and we have testimony that his application was not without result. But there is a great difference between that and producing the design for the Imperial rotunda, or even having a predominant share in the preparation of the plans and the conduct of the works, especially when it comes to vaulting. His literary productions do not seem to suggest the powerful brain which gave birth to the Palatine Chapel.

[1] D'Achery, *op. cit.—Chronicon Fontanellense.*
[2] Migne, *Patr. Lat.*, Vol. 100—*Epistolae.*
[3] Duchesne, *Historiae Francorum Scriptores—Eginhardi abbatis epistolae.*
[4] *Mon. Germ. hist.—Catalogus abbatum Fuldensium.*
[5] Migne, *Patr. Lat.*, Vol. 114—*Carmina—De Einharto magno Eginhardo.*
[6] *Op. cit.*
[7] *Mon. Germ. hist.—Ademarus, Historiae.*

Moreover, had he been the architect and master of the works, it would be difficult to explain the silence of the chronicles about the fact (while the names of several contemporary architects are preserved), and also his own; whereas he does not fail to mention the church which he built at Seligenstadt, and insist on its importance: "non indecori operis."[1] It would be incomprehensible that, when he laid aside his courtly robes as Minister of the Imperial Household and Crown Notary in order to assume the humble garb of a presbyter and abbot, he should have forgotten all the science, unequalled at the time, displayed in the great rotunda, and have exhibited so limited and mean a substitute for it in the churches which we know he founded. This consideration has peculiar force in the case of the one at Seligenstadt, erected to receive the precious relics of SS. Peter and Marcellinus, so coveted and venerated by the founder, and also to form the resting place of his own mortal remains. For even without raising an edifice too grand for the pecuniary resources of himself and his wife Emma—and they were not contemptible—he might well have built one proportioned to his means, and yet of a character to form a monument of the remarkable and precocious architectural attainments which have been ascribed to him.

We conclude, then, that Einhard's claim to be the architect of the chapel at Aachen cannot survive the test of sound criticism. His name is never connected with it either as designer or executor. The Monk of St. Gall, who has left us the least incomplete account of the rotunda, makes no allusion to him in this connection.[2] All that we can say is that, being young and without experience in the difficult art of vault construction, he may have had the opportunity of initiation into its secrets owing to the fact that the Emperor had summoned to Aachen for the purpose masons from Italy and France. The craftsmen of Piedmont and Lombardy were the best known and most skilful in the Empire. Two centuries before, their services had been engaged by Nicetius, bishop of Trier, as we learn from the letter of bishop Ruffus of Turin, who must have been referring to workmen of his own or neighbouring dioceses. And my belief is that it was to them and to workmen from other parts of Italy and from Transalpine Gaul, that the monk alluded in the words: "ad cuius fabricam de omnibus cismarinis regionibus magistros et opifices omnium id genus artium advocavit."[3] Springer, too, thought that these master masons came from Italy and Gaul.

Having said so much let us turn to the churches of Steinbach and Seligenstadt, which are very instructive from the evidence which they afford as to the type of building adopted by Einhard in his own foundations, and to his capacity as an architect.

THE CHURCH OF STEINBACH NEAR MICHELSTADT is believed to have been built by Einhard († 844) some time after Louis the Pious (814–840) had made him and his wife Emma a grant of Michelstadt (815) in the Odenwald, where a small wooden church existed, and before 819, the year in which the husband and wife transferred the chapel at Michelstadt to the abbey of Lorsch.[4] The dedication took place in 821.[5] In it were deposited the relics of SS. Peter and Marcellinus, stolen from Rome (826–827), and later enshrined in the apse of the church at Seligenstadt.[6]

[1] *Mon. Germ. hist.—Translatio et miracula sanctorum Marcellini et Petri.*
[2 3] *Mon. Germ. hist.—Notkerus Balbulus, De gestis Karoli Magni imperatoris.*
[4] *Mon. Germ. hist.—Chronicon Laureshamense.*
[5] *Mon. Germ. hist.—Annales Fuldenses antiqui.*
[6] *Mon. Germ. hist.—Einhardus, Translatio et miracula sanctorum Marcellini et Petri.*

Of the original structure, of T cross plan with nave and aisles terminated by apses, there remain the nave (Figs. 724, 725) and the north arm of the transept with their respective apses. In its present condition the nave measures about 79 ft. × 24 ft. The arches, barely 4½ ft. wide, and now walled up, formerly opened into the aisles. They rest on quadrangular piers. The walls carried by the arches contained originally a corresponding number of narrow round-headed windows, splayed on the inside. The main apse, starting directly from the transept wall and of semicircular form, is lighted by three similar windows. The gable and wall above the frontal arch of the apse is pierced by three round windows, two of which were intended to light the transept, and the third to give light and air to the roof. It seems that the use of round windows, derived as we suggested in our account of Norwich from a Roman source, was widely spread at this time in Germany, for we find them even represented in illuminated MSS. I may refer to the pictures of two aisled churches which I have noticed in the St. Gall "Psalterium aureum" (IXth century),[1] where they appear in the nave and aisles.

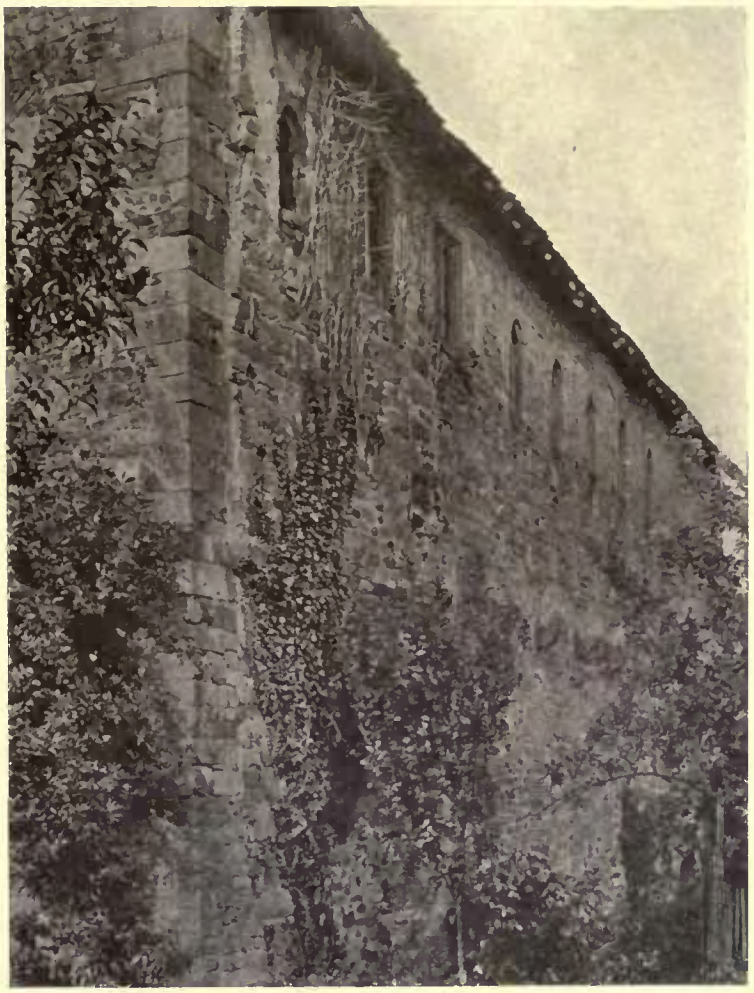


Fig. 724.—Steinbach near Michelstadt. South side of church (815-819).

So far as one may judge from what is left, the arms of the transept were entered through two arches, barely 4½ ft. wide, with moulded imposts. The way in which the north arm of the transept is shut off suggests that it was used as a chapel. The apse which opens out of it has lost its original appearance.

With the exception of the apses, the whole building is roofed with timber. Underneath the choir, crossing, and part of the nave, extends a crypt, the whole of which is underground and consists of barrel vaulted passages.

So far as may be inferred from what mutilations, alterations, and extensions in

[1] Library of the former Abbey of St. Gall.

the past have spared, and also from Einhard's allusions, of the same type though of larger dimensions was the church of SS. Peter and Marcellinus at Seligenstadt (827), previously known as Mulinheim and already containing a small stone church, which was given by Louis the Pious to Einhard and Emma in 815. Here he erected his new church dedicated to the martyrs, and in it he finally enshrined their relics previously deposited at Steinbach and in St. Martin's at Ostheim.[1] [2]

The church of Seligenstadt consisted of a nave and aisles, the former being about 33 ft. wide, and the latter only half as much, separated by nine quadrangular piers on either side, which an excavation in the modern facing has shown to measure some 28 in. × 32 in. and to be constructed of bricks taken from Roman buildings. They have moulded imposts.

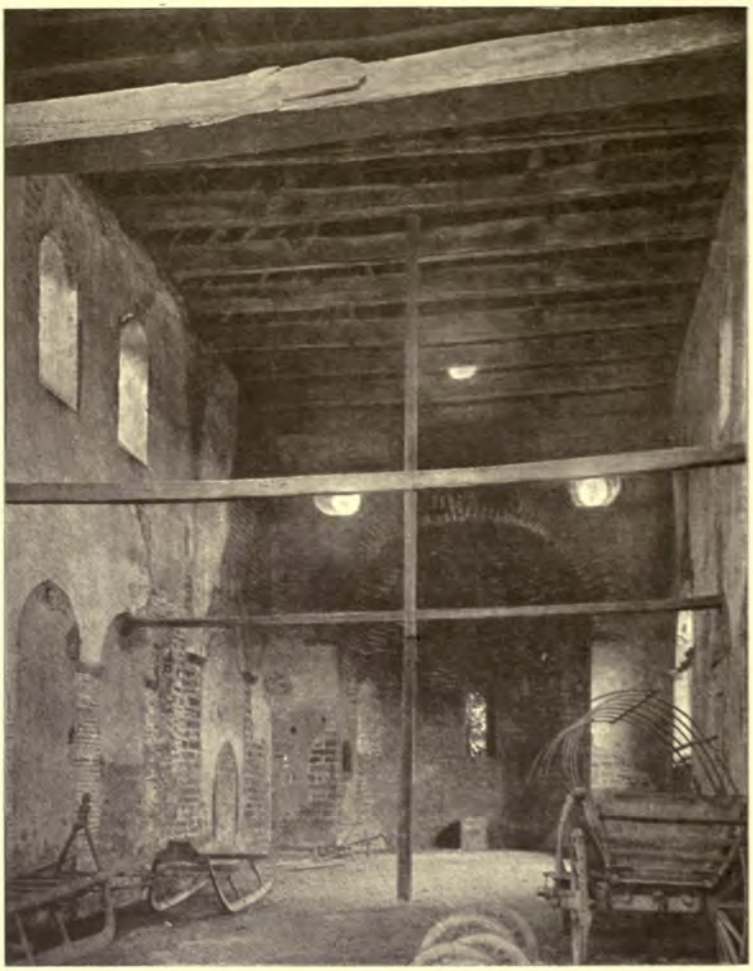


Fig. 725.—Steinbach near Michelstadt. Church (815–819).

It is easy to see that the plan of both of Einhard's churches, with its T cross form, was derived from that of the Vatican Basilica. But they are rough work, almost devoid of architectural decoration, and roofed, with the exception of the terminal recess, with wood. These facts are difficult to reconcile with the idea that the man who designed them was the creator and constructor of the principal buildings erected by Charles the Great.

* * *

After Charles the Great's conquest of Lombardy had brought Italy into direct relations with his northern dominions, architecture made a brilliant appearance in the German lands with the rotunda of Aachen ; but this appearance was as ephemeral as the Empire which its founder was unable to endow with permanent vitality. It

[1] *Mon. Germ. hist.—Chronicon Laurvshamense.*

[2] *Mon. Germ. hist.—Einhardus, Translatio et miracula sanctorum Marcellini et Petri.*

was ephemeral, too, because the architectural awakening brought about by the Emperor in the lands beyond the Alps was the result of his personal influence, and not the effect of a long period of preparation and, at the same time, the expression of the spirit and the needs of the age. In fact, all the buildings of his reign and vast Empire which are of importance for their vaulted construction were due to his personal will, and intended to promote his own glory and self-satisfaction. Thus, in addition to the great rotunda, another royal chapel of similar form was attached to his palace at Casseneuil[1] which was destroyed by the Normans in 879. Other buildings, too, if not erected by his orders, were aided by his contributions, such as Theodulf's church at Germigny des Prés (801–806).

Moreover, Art is dependent on public prosperity, and this was certainly not assured by the successors of Charles, whose incapacity is the theme of the historical records of two centuries. The first was Louis the Pious (814–840), born to wear the tonsure rather than the crown. In the course of a few years he fatally undermined the inheritance of the Pippins, Charles Martel, and Charles the Great, more particularly by the weakness of his conduct towards his wife Judith, and his youngest son Charles the Bald. His reign was disturbed by domestic and civil strife, fomented not so much by the indifference of his subjects, who were disgusted by his weakness, as by the discord between the Latin and the German element; in addition to which there came the incursions of Danes or Normans and Saracens. Under his successors, Lothair (840–855), Louis the German (843–876), Charles the Bald (843–877), and Pippin the Younger (838–846), the anarchy inherited from their father and grandfather respectively was intensified by the internal struggles to which we have referred, and by the abandonment of any attempt to resist the Northern barbarians and the Saracens; and at length the partition of Verdun (843) dissolved the fabric of the Empire.

This partition was succeeded by years of fruitless effort to diminish, if it was not possible to prevent, the raids within the divided realm of the barbarian hordes which left a trail of blood and ruin wherever they passed. The war against invaders was supplemented by the one between Louis II and Charles the Bald. Finally, the death of Lothair (855) broke the last formal tie which still united the Empire of Charles the Great. It was followed by new family and civil wars, with the usual accompaniments of incursions and rebellions, until with Charles the Fat (881–887) the legitimate branch of the Imperial race became extinct in Germany.

Thereupon the eastern Franks elected as king the brave Arnulf of Carinthia (887–899), bastard son of Carloman, king of Bavaria (865–880). He succeeded in breaking the insolence of the Normans at Louvain (891), in suppressing the revolt of his vassals, and, finally, in assuming the Imperial diadem at Rome (896). His son, Louis the Child, was elected as his successor (899–911), but his weak rule was troubled by civil wars and barbarian raids. With his death even the illegitimate German line of the descendants of Charles the Great came to an end.

Some idea of the conditions of ecclesiastical architecture in the German lands during the age of the heirs of Charles the Great is afforded by three churches, of which two are still in existence while we possess the plans of the third. It may be, too, that there is a fourth, of which a drawing exists. Let us see what they were like.

THE ROUND CHURCH OF ST. MICHAEL AT FULDA was built by Eigil, fourth abbot of Fulda, between the years 818 and 822,[2] as we are told in his Life, written by

[1] Cordero, *op. cit.*

[2] *Mon. Germ. hist.—Annales Fuldenses antiqui.*

Fig. 726.—Fulda. Church of St. Michael (818–822).

the monk Brun Candidus;[1] [2] and it is known that it was not finished in 819, for Haistulf, archbishop of Mainz (813–826), did not dedicate it till 822.[3] Anyone who reads this Life (in verse as well as prose) will find a clear and definite statement about the primary intention of the building, and also a description of its original form, corresponding to that of the existing structure. It was a cemetery church, of circular plan, with an annular aisle, supported by a circle of eight columns, covered with a dome of masonry, and having a crypt beneath with its vaulting supported by a central column. The actual building (Figs. 726, 727) contains eight arches on the ground-floor with columns surmounted by four capitals of Roman origin, three of which are Corinthian and one Composite, and by four plain cubical funnel-shaped capitals with deep abaci. An apsidal sanctuary projects at the east.

The building was altered in the XIth century[4] by removing the vaulting and raising the

Fig. 728.—Trier. Porta Nigra (IVth Century).

[1] *Mon. Germ. hist.—Vita Eigilis abbatis Fuldensis.*

[2] *Mon. Germ. hist.—De vita Aegili versibus explicata.*

[3] Browerus, *Fuldenses antiquitates.*

[4] Lübke, *Geschichte der deutschen Kunst.*

height of the church as we now see it. A triforium gallery was constructed with openings, each of which was divided in two by a shaft carrying a cubical funnel-shaped capital and a corbel pulvin, hollow chamfered (recalling the prototypes of this kind at Mettlach [987]) and curled over at the ends. Eight windows were also inserted, and the whole was roofed with wood. At the west a nave was added, approached through a tower porch, the two-light openings of which have Lombardic cubico-spherical capitals with pulvins like those just described. This nave, and two other additions on the north and south, have given the rotunda a cruciform appearance.

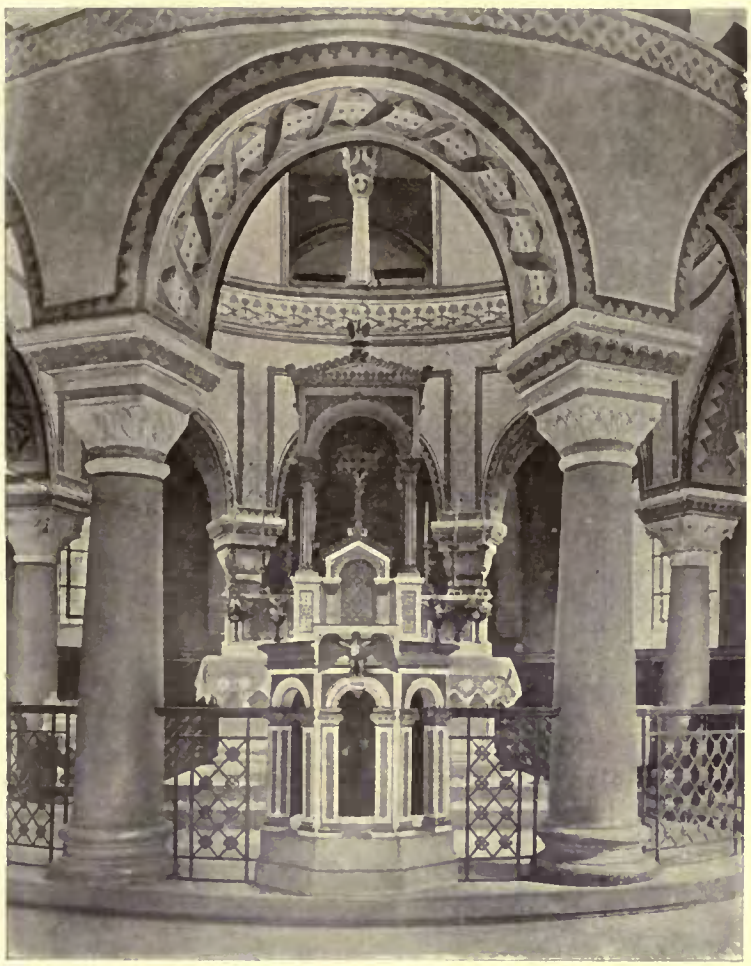


Fig. 727.—Fulda. Church of St. Michael (818-822).

Beneath is a crypt. The middle part has a roughly constructed concentric barrel vault springing from a central column (a fragment of ancient origin), provided with a rude Ionic capital, and an inverted funnel-shaped capital for base. The annular aisle also has a barrel vault, which has been cut by the insertion of cross walls. Originally it was lighted by very narrow windows.

It is obvious that Eigil, the architect of the sepulchral rotunda of the abbey of Fulda ("Eigil . . . aliam aecclesiam in cymiterio rotundam mira arte typice composuit" [1]), derived his idea from the round tombs of ancient Rome. The annular rotunda, with its dome and barrel vault, reproduces on a smaller scale the mausoleum of Santa Costanza (IVth century). The circular vault of the central part of the crypt is modelled on the crypt of the mausoleum in the Villa of the Gordians on the Via Praenestina (IIIrd century), for there can be no doubt that the round building popularly known as "Tor de' Schiavi" was the tomb of the Gordian family. Below it is a beautifully constructed crypt, turning round a central mass which serves as a support for the whole structure. This tomb provided the suggestion for the architect of the mausoleum of Romulus († 309), the son of Maxentius, standing in the midst of a

[1] *Mon. Germ. hist.—Catalogus abbatum Fuldensium.*

spacious arcaded court close to the Circus of Maxentius by the old Via Appia, though he gave the central block a more developed form by taking out of it eight semicircular recesses corresponding to those in the outer wall. In all these tombs the vaulted crypt is derived from the typical form found in the "tholos" tombs of Volterra. Thus the Inghirami Tomb (now in the Archaeological Museum at Florence), thought to belong to the IInd or IIIrd century B.C., has a central pier supporting an elementary annular vault.

Fig. 729.—Turin. Porta Palatina (29 B.C.–14 A.D.).

In the rotunda at Fulda the Roman cubical funnel-shaped capitals should be noticed. They are derived directly from those of the Porta Nigra at Trier (Fig. 728) belonging to the second half of the IVth century, or more precisely to the reign of Valentinian I (364–375), under whom the city was much embellished [1] and put in a better state of defence against the Germans. The capitals of the gate at Trier are the oldest specimens of the kind that we have seen. It was on this form of capital, together with the Ravennate pulvin, that the Byzantines afterwards modelled their cubical funnel capitals of quadrangular shape with swelling sides, which in their simplest form may be seen in the cistern of Binbir-direk at Constantinople (VIth century).

In connection with the Gate of Trier we may observe in passing that the Gallo-Roman peoples gave exceptional importance to their city gates. In addition to this one, we may mention as proof the Porta Palatina of Turin (Fig. 729), erected under Augustus (29 B.C.–14 A.D.), and the Porta dei Borsari at Verona (IIIrd century).

Though Eigil's church, like that at Aachen, betrays its Italian origin, the type of its original capitals indicates the work of northern craftsmen. In Italy at the time this form was rarely used, the preference being given to the Pre-Lombardic cubical pattern. The vaulted roof is to be explained by the fact that the church was erected

[1] Browerus, *Antiquitates et annales Trevirenses.*

very shortly after the completion of the great works at Aachen, and under their influence; and, indeed, some of the builders there employed may have been engaged on it.

THE ABBEY CHURCH OF ST. GALL was rebuilt by Abbot Gotzpertus (816–837) from the designs of the two monks Winiharius and Isenricus. It took seven years to finish (822–829).[1][2][3]

In studying the original of the very important plan of the abbey drawn on parchment, which is dated about 820,[4] we found that the church presents three notable features, viz. the apses facing one another at the east and west ends, the semicircular aisle round the western apse, and the towers which flank the latter.

The first of these peculiarities we discussed in our account of Abingdon Abbey (675); and we dealt with the subject of ambulatories, with or without arcades, in connection with the cathedral of Ivrea and Saint Bénigne at Dijon. Western towers we know were designed to contain the staircases belonging to the façade, after the fashion of Ravenna. Their function here is made clear by the legend on the plan, "Ascensus per cocleam ad universa super inspicienda."

THE CATHEDRAL OF COLOGNE.—We possess a written account of the general form of the church erected by Archbishop Hildebold (785–819), and restored or completed by Archbishop Willibert (870–889), who dedicated it in 873. It was of basilica plan, with a choir apse at either end and crypts underneath them. Two wooden bell-towers flanked the western apse, each containing an altar. It was lighted by round windows in addition to others of rectangular form, some larger (of which three were in the eastern gable) and some smaller.

We are not told who restored or rebuilt Willibert's church after its injury in the terrible fire from which Cologne suffered at the hands of the Normans in 882. We only know, on the authority of Gelenius,[5] that in 1080, when Sigewin was archbishop (1079–1089), the easternmost part of the cathedral was suddenly burned.

A certain amount of light is thrown on the subject by the important XIth century Evangelistarium executed by the brothers Burchard and Conrad "ad altare Sancti Petri

Fig. 730.—Cologne. Cathedral Treasury. Illuminated leaf of XIth Century Evangelistarium with representation of the old Cathedral.

[1] Mabillon, *Annales Ord. S. Benedicti.*

[2] *Mon. Germ. hist.—Ratpertus, Casus S. Galli.*

[3] [4] Keller, *Bauriss des Klosters St. Gallen vom Jahr* 820.

[5] *De admiranda, sacra et civili magnitudine Coloniae Claudiae Agrippinensis Augustae, Ubiorum urbis.*

infra muros Coloniae" for Illinus, canon of the cathedral,[1] in which may be seen (fol. 16 v.) a picture of the donor presenting the book to St. Peter seated in a chair, and above them a representation of the metropolitan church (Fig. 730). Granted, always, that it is certain that the volume is earlier than 1080. For in that case we have an illustration (if only approximately accurate) of the cathedral of Cologne in its restored or new form after 882, showing the transepts belonging to the choirs at either end of the building. The two towers rising at the east end—evidently bell-towers, as the openings in the highest stage show—must be earlier than the bell-towers of the cathedral at Ivrea (973–1001 or 1002), and are therefore the prototype of this arrangement. In the present case it is very probable that it was suggested by the staircases formed in the outer angles at the end of some building of the Roman period. Such, for instance, is the Basilica at Trier (Fig. 731), thought to belong to the age of Constantine (311–337), but which, considering its grand dimensions, and the character of its brick facing, together with the enclosing arches round the windows, which are original, may well be dated in the time of those great builders, Diocletian (284–305) and Maximian (286–310).

Fig. 731.—Trier. Basilica (IIIrd or IVth Century).

I may mention here that a three-lobed building, the plan of which by Fra Giocondo (?) is preserved among the drawings in the Uffizi, shows two staircases flanking one of its apses.

THE SEPULCHRAL CHAPEL OF LORSCH is of rectangular shape, and its eastern and western sides (Fig. 732) are decorated with a range of arches and blank triangular-headed arcading. The walls are constructed with polychrome polygonal stone checkers in imitation of Roman polychrome "opus reticulatum" such as may be seen in the amphitheatre at Assisi. It always had, as now, a wooden roof of very high pitch.

The interior (Fig. 733) contains a sarcophagus found in the old cloister of the neighbouring abbey of St. Nazarius. It is ornamented with pilasters and Ionic capitals exactly like those of the triangular-headed arcading on the chapel itself, and probably formed the coffin of Emperor Louis III the Saxon.

Many writers, Adamy[2] among them, believe that this structure (now known as

[1] Cologne. Treasury of the Cathedral.

[2] *Die fränkische Thorhalle und Klosterkirche zu Lorsch—Historischer Verein für das Grossherzogthum Hessen*, 1891.

the Michaelskapelle) was the old vestibule of the atrium of the abbey church of St. Nazarius, founded by King Pippin in 764,[1] and later rebuilt on a larger scale by the monk Adalbert (1144–1151). I think there is no doubt that it really is the burial chapel erected by Louis III the Saxon (876–882) near the abbey of Lorsch, as has been stated by others.[2,3]

Fig. 732.—Lorsch. Sepulchral chapel. West side (876–882).

The chronicle of Lorsch says that Louis III buried his father Louis II the German (843–876), the founder of the national dynasty, in the abbey of Lorsch ("patrem in Laureshamensi monasterio tumulavit"), and that afterwards he himself was buried near his father in a church which he had built, known in the days of the chronicler as "the variegated church": "Ludowico rege Germanico, filio Ludowici, defuncto et iuxta patrem apud Lauresham in Ecclesia quae dicitur Varia, quam ipse huius rei gratia construxerat, sepulto." Later, in 1053, this chapel was dedicated to the Virgin, the Apostles, and All Saints.[4]

Fig. 733.—Lorsch. Sepulchral chapel (876–882).

Now the existing Michaelskapelle is, as a matter of fact, "varia" owing to its polychrome facing. That it cannot be the original porch leading to the atrium in front of St. Nazarius (according to Adamy's imagin-

[1] *Mon. Germ. hist.—Chronicon Laureshamense.*

[2] Savelsberg, *Deutsches Kunstblatt, herausgeg. von Eggers.*

[3] Förster, *Denkmale deutscher Baukunst.*

[4] *Mon. Germ. hist.—Chronicon Laureshamense.*

ary design) is proved by the fact that the terrible fire of 1090 destroyed the whole church, which had a wooden roof,[1][2] and would certainly not have spared the atrium and its vestibule. It is also proved, and still more convincingly, by the absence of any trace of the junction between the existing polychrome structure and the spacious cloister court which is supposed to have existed.

Moreover, in the Frankish realm capitals were of quite a different type and execution in the time of Pippin, under whom the building of St. Nazarius was begun, and this we learn from the crypt of the church at Flavigny (755–768). Again, edifices of the age of Charles the Great, when the works at Lorsch were finished, had no external architectural decoration, as we know from the rotunda of Aachen and the churches of Germigny des Prés (801–806) and Steinbach (815–819). And that this was still the case in the days of Louis the Pious the round church at Fulda (818–822) bears witness.

The sepulchral chapel of Lorsch is to be regarded as the earliest instance of a building decorated with ranges of blank triangular-headed arcading, a design of German origin. For although at an earlier date the baptistery at Poitiers (VIIth century) had exhibited the decorative use of pediments and blank arcading alternately triangular and round-headed, the chapel at Lorsch is the first dated building that displayed this particular form of treatment. This characteristic feature may be traced back to the Ravennate and Pre-Lombardic blank arcading with round arches; while the substitution of triangular for round heads may have been suggested by some building such as the baptistery of Poitiers. It may even have been derived from the pedimented colonnading on sarcophagi of the Early Christian period, of which examples are to be found in the Lateran Museum. Or, again, it may have its source in some building of the Roman age. It was afterwards copied by the architect of the abbey church of Gernrode (968). And it was Lorsch and Gernrode which furnished the pattern to those who carried triangular-headed arcading to England.

I may mention here that in the Xth century MS. of Boethius "De institutione arithmetica" at Bamberg[3] I have noticed the front of a building with triangular-headed arcading on its upper part, the heads forming part of a lozenge-shaped decoration; while the "Evangelistarium of Essen," believed to be of the VIIIth or IXth century, and earlier than 834,[4] shows triangular-headed arcading formed of interlacing bands and scrolls.

I think that the capitals at Lorsch are the work of French chisels. We shall see presently how different were the knowledge and handiwork of the German artists.

* * *

On the death of Louis the Child (899–911), Conrad I of Franconia was raised to the throne, but his reign (911–918) was disturbed by perpetual civil wars and barbarian invasions. The elevation, however, of the illustrious Henry I the Fowler (918–936), the victor of Merseburg (933), saw the restoration of order and security in Germany.

THE CRYPT OF THE CHURCH OF ST. WIPERTUS NEAR QUEDLINBURG.—The church of St. Wipertus was erected by Henry I and his consort Matilda (†968). A passage in her life fixes the date as 936.[5][6][7][8]

[1] *Mon. Germ. hist.—Chronicon Laureshamense.*
[2] Helwich, *Antiquitates Laurishaimenses.*
[3] Bamberg, Royal Library.
[4] Humann, *Die Kunstwerke der Münsterkirche zu Essen.*
[5] *Mon. Germ. hist.—Annales Quedlinburgenses.*
[6] Knackfuss, *Deutsche Kunstgeschichte.*
[7] Dohme, *op. cit.*
[8] *Mon. Germ. hist.—Vita Mahthildis reginae.*

The crypt (Fig. 734) is all that is left of the original building. It has the form of a small basilica ending in a semicircular apse. Every part is covered with barrel vaulting, and it is surrounded by an ambulatory. The pillars have roughly made capitals formed by an inverted ovolo, a hollow moulding, and a roll, with a rude abacus. The bases have two bulbous rolls separated by a hollow moulding.

Fig. 734.—Quedlinburg. Crypt of St. Wipertus (936).*

This crypt, above which must have stood the apse and presbytery of the original church, is important on account of its vaulted ambulatory, perhaps suggested by the one in Constantine's Lateran Basilica as enlarged by Pope Sergius II (844–845), which I carefully examined before its recent destruction. We have here, in fact, the oldest example of a crypt of this form to be found either in Italy or beyond the Alps.

The crypt of St. Wipertus recalls the ancient basilica of the SS. Annunziata at Prata, near Avellino. Of the primitive church there survives the interesting and, on account of its architectural form, important apse, pierced by round-headed windows instead of arches (Fig. 735). In it is recessed a niche for the bishop's seat, a Pagan and Roman idea, for in the back of an exedra in the "Palace" of Hadrian's villa at Tivoli[1] a semicircular niche occurs. In the IVth century it was introduced in the basilica of St. Petronilla between the Via Ardeatina and the Via Ostiensis,[2] and also in that of

Fig. 735.—Prata near Avellino. Apse of the Church of the SS. Annunziata (VIIth Century).

* The illustrations belonging to Quedlinburg and Gernrode are from photographs by Herr E. Kliche.

[1] Reina e Barbieri, *Rilievo planimetrico e altimetrico di villa Adriana.*

[2] *Bull. di arch. cristiana*, 1874—De Rossi, *Pianta della basilica di Santa Petronilla nel cimitero di Domitilla.*

the Martyrs Simplicius, Faustinus, and Viatrix (382), on the Via Portuensis near Rome.[1]

The spiral terracotta shafts (made for their places) which support some of the arched openings in the apse at Prata, have capitals carved with very rude, stiff, plain leaves, and cauliculi like ram's horns, slightly curved at the top. These capitals enable us to fix, more precisely than has hitherto been done, the unknown date of the apse of the Annunziata, which some[2] regard as belonging to the earliest Christian age, while others[3] put it between the VIIth and Xth century. By a process of elimination its date will be, approximately, that which followed the Lombard Conquest and the scourge of pestilence and famine which afflicted Italy about 566, the period which saw the artistic awakening initiated by Theodelinda (590–625); in other words, the first half of the VIIth century. Before the descent of Alboin (568) and after the reign of Rotharis (636–652), Italy never saw such degraded work as these capitals (especially the round one), even though produced in remote places and by local carvers.

The date which we have suggested explains the arcaded form of the apse, a plan which was in favour from the end of the IVth century to about the second half of the VIth both at Rome and Naples; so much so that in the latter century Bishop Vincentius (554–577) was still employing it in San Giovanni Maggiore at Naples ("Hic fecit praefulgidam basilicam. . . . Quem amplis aedificiis in gyro distinxit"[4]), while at Rome Pope Felix IV (526–530) adopted it for SS. Cosma e Damiano.

Fig. 736.—Quedlinburg. Old Crypt of St. Servatius (936).

THE CRYPT AND CHURCH OF ST. SERVATIUS IN THE CASTLE AT QUEDLINBURG.—The erection of the castle church of Quedlinburg was begun

[1] De Rossi, *La Roma sotterranea cristiana—La piccola basilica damasiana dedicata a Simplicio, Faustino, Viatrice, martiri storici del cimitero di Generosa.*

[2] *Archivio storico per le provincie napoletane*, 1878—Taglialatela, *Dell' antica basilica e della catacomba di Prata in Princ. Ulter. e di alcuni monumenti avellinesi.*

[3] Bertaux, *op. cit.*

[4] *Mon. Germ. hist.—Scriptores rerum langobardicarum.—Gesta episcoporum neapolitanorum.*

by Matilda at the wish of her husband Henry I, shortly before his death in 936, as we are told in the Life of the Empress. In that year the crypt must have been finished, for it received the tomb of the great Emperor. In 997 the church was rebuilt by the second Matilda († 999), daughter of Otto I the Great (936–973); but it was not finished till 1021, as in that year a second dedication took place.[1][2][3] In 1070 the town was burned ("Quindelineburg exusta est"[4]), and with it the church, which was rebuilt and reconsecrated in 1129.[5]

The crypt of the original building, which was discovered in the last century below the floor of the apse in the present crypt, belonging to the reconstruction after the fire of 1070, is surrounded by a range of recesses separated by engaged shafts which carry a continuous architrave; the whole being composed of stucco, and of rude workmanship (Figs. 736, 737). That this is the crypt of the primitive church is proved by the existence at its west end of the tombs of Henry I, of his wife Matilda ("sepultaque est coram altari Christi presulis Servacii iuxta seniorem suum"[6]), and of their granddaughter, the Abbess Matilda, who in 999 was interred "iuxta tumulos regum, avi et aviae suae Heinrici et Mechtildis."[7]

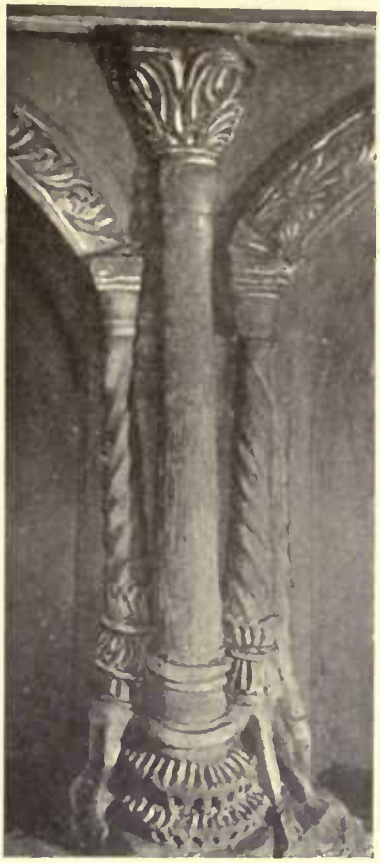


Fig. 737.—Quedlinburg. Shaft in old Crypt of St. Servatius (936).

Of a later date than this crypt, and probably forming part of the works carried out between 997 and 1021, is the underground apsidal chapel beneath the south aisle of the church. One of the side walls contains three arches with two shafts bearing quasi-Composite capitals, above which are corbel pulvins also carved with foliage, like some of those at Mettlach (997). The bases are of bulbous form, and rest on tall moulded plinths. The carving recalls that on the capitals and pulvins at Mettlach, though it is not so advanced.

The constructional supports in the crypt of St. Wipertus and the decorative ones in the crypt of St. Servatius found an echo in England. As a matter of fact we have already seen how, not earlier than the reign of Edgar (959–975), spiral shafts and inverted truncated pyramid capitals made their appearance in the crypt and apse of Repton; while several buildings contain bases with disproportionate, clumsy rolls, or of the bulbous form, and show the influence of the outlandish and barbarous mouldings of the supports in the church at Quedlinburg. This influence must be connected with the monastic intercourse which from the days of St. Gall († about 630) and St. Boniface († 755) had been going on between England and Germany with the other Teutonic lands, and was only intensified by the marriage of the pious Edith (929–946), daughter of Edward the Elder (901–925), with Otto the Great as his first wife.

[1] *Mon. Germ. hist.—Annales Quedlinburgenses.*
[2] *Mon. Germ. hist.—Widukindus, Res gestae Saxonicae.*
[3] *Mon. Germ. hist.—Vita Mahthildis reginae.*
[4] *Mon. Germ. hist.—Annales Corbeienses.*
[5] Knackfuss, *op. cit.*
[6] *Mon. Germ. hist.—Thietmarus, Chronicon.*
[7] *Mon. Germ. hist.—Annales Quedlinburgenses.*

In connection with the two important monuments which we have examined at Quedlinburg I think it opportune to mention that bulbous bases, sometimes resting on a plinth formed like a church, are represented in abundance in German MSS., *e.g.* the "Isidori Etymologiae" (Xth century), the "Psalterium Folchardi" (IXth century), and the "Vita S. Columbae" (IXth century), in the Library of St. Gall.

In the next place, these structures are evidently the work of Saxon hands, no doubt the best that could be procured, considering the importance of the place where they are found, the rank of the founders, and the royal use for which one of them was intended. They give an idea of the state of building, carving, and stucco

Fig. 738.—Quedlinburg. Crypt of St. Servatius (1070–1129).

work in Germany at a time when the local craftsmen had been forced to rely on their own attainments without help from outside. And this confirms the opinion we expressed about the carvers of the capitals in the chapel at Lorsch.

Let us now turn to the existing crypt (Fig. 738) and the cathedral church of Quedlinburg which rises above it. The crypt under the choir (rebuilt in the Pointed style) and transept of the present church consists of a central space, divided into nave and aisles by pillars and terminating in an apse, and two lateral arms with small apses at their extremities. The unraised cross vaulting springs from capitals ornamented with stiff, plain leaves, palmetto leaves and other kinds of foliage, cauliculi, crosses, interlacing bands ending in a sort of Ionic volutes (Fig. 739), pine cones, demons' heads with serpents coming out of their mouths and biting their ears (Fig. 740), and eagles. Three are of a curious stepped form.

The church consists of nave and aisles separated by arches with columns, between every two of which comes a pier. The columns have characteristic bases with two

rolls and a broad hollow moulding between them, while the capitals are of cubico-spherical form, carved, like the deep abaci, with animals (Fig. 741), human figures, birds, foliage, interlacing, scroll work, monsters, animal heads, &c. From an artistic point of view, both in the crypt and the church the foliage and other decorative elements are fairly well treated while the representations of living beings are almost uniformly of barbarous character.

Fig. 739.—Quedlinburg. Capital in Crypt of St. Servatius (1070–1129).

Fig. 740.—Quedlinburg. Capital in Crypt of St. Servatius (1070–1129).

With the exception of the two minor apses in the transept, which have half-domes, the surviving portions of the church of 1070–1129 are roofed with timber. At the west end is the narthex with unraised cross vaulting and visible vaulting arches, above which is a gallery with pairs of openings, covered by a wooden roof. It is flanked by two towers, rebuilt like the gallery for the bells which unites them in their upper part.

The artistic features in the crypt are of the same date as those in the nave and transept, and the continuous cross vaulting in the central part of the crypt is contemporary with that constructed with wall and transverse arches in the lateral portions and in the narthex. The view, then, of those who regard the crypt as belonging to a different date from the church, falls to the ground. The date in question belongs to the years between the fire of 1070 and the reconsecration of 1129; for, in spite of what is believed in some quarters to the contrary, there does not survive one stone upon another of the new structure of 997 that meets the eye. The quality of the builders and artists of

Fig. 741.—Quedlinburg. Church of St. Servatius. Capital (1070–1129).

Fig. 742.—Ilsenburg. Capital in the Church (1087).

the Harz district in the second half of the Xth century is revealed by the rough irregular vaulting in the eastern crypt of St. Cyriacus at Gernrode, and by the rude capitals and bases of the pillars, as well as by the decoration of the apse at the east end and of the western towers.

On the other hand, the capitals both in the crypt and the church at Quedlinburg present forms unknown to the West, and still more to the East, before the epoch of about 1000. I refer to the Lombardic cubico-spherical capitals which appear for the first time in Sant' Abondio at Como (1013–1095), and do not show themselves in Germany till after 1015, in St. Michael's at Hildesheim. Moreover, the Lombardic figure capitals, no longer showing the merely symbolic figures of Early Christian art, and going beyond the representations on the capitals of the VIIIth to the Xth century, did not gain much extension before the first half of the XIth, and only reached their culmination by the addition of scenes of writhing and struggling monsters in the second half of the XIth and the following century.

Fig. 743.—Drübeck. Capital in the Church (XIth or XIIth Century).

I may notice here that the capitals at Quedlinburg have obvious analogies in style, modelling, and execution, with those in the church of Ilsenburg (Fig. 742), erected in 994 and rebuilt after the injuries it suffered during the disturbed reign of Henry IV (1056–1106) by Burchard II, bishop of Halberstadt (1059–1088), who consecrated it in 1087.[1][2] Compared with them the capitals at Quedlinburg show a more advanced stage of art, a fact to be explained by the earlier date of the church of Ilsenburg.

They have similar analogies with the capitals in the church at Drübeck (Fig. 743) which was in existence in 877 when Louis III (876–882) conferred rights of immunity on the monastery.[3] We have no information about it between 1058 and 1130, but it is believed to have been rebuilt in the early years of the XIIth century. The capitals at Quedlinburg are differentiated from these by more artistic arrangement of the foliage, so that those at Drübeck may very well belong to the end of the XIth or the beginning of the XIIth century.[4]

Over and above the reasons given for this conclusion there is the fact that crypts of basilica plan, embracing not only the area of the apse and presbytery, as in the parish church of San Leo (881–882), but that of the transept as well, with cross vaulting sustained by pillars. did not make their appearance until the XIth century was well advanced. The two earliest dated examples are the one in the cathedral of Speyer of 1030, and that under the existing cathedral of Parma. The latter crypt (Fig. 744) belongs to the church rebuilt by Bishop Cadalus (1046–1071), and consecrated in 1106. For though the church of Steinbach has a crypt which extends not only to the crossing but also under part of the nave, it consists of mere underground passages with *arcosolia* like the Roman Catacombs.

Further, we must remember that portals of the Lombardic type only came into

[1] *Mon. Germ. hist.—Annales Hildesheimenses.*
[2] Jacobs, *Urkundenbuch des in der Graftschaft Wernigerode belegenen Klosters Ilsenburg.*
[3] Jacobs, *Urkundenbuch des in der Graftschaft Wernigerode belegenen Klosters Drübeck.*
[4] Kugler, *Kleine Schriften.*

existence about 1032 with that of Sant' Andrea at Montefiascone: consequently, an entrance of this kind could not have been used for the abbey church of Quedlinburg in 997.

Before leaving the church we may notice that the characteristic bases in the nave have their counterparts in the architectural decoration found in the illuminated MSS. from the VIIIth or IXth to the XIth century. Instances are the "Concordia Evangeliorum" (IXth century) and the "Psalterium Aureum" (IXth century) at St. Gall;[1] the Evangelistarium written for the Emperor Henry IV (Cat. 78 A. 2), and the Gospels of the abbey of Abdinghof (XIth century) at Berlin;[2] the "Alcuin Bible" of the VIIIth–IXth century at Zurich;[3] the "Sacramentarium S. Gregorii

Fig. 744.—Parma. Crypt of the Duomo (1046–1071).

Papae" written at Freising (1052–1078), now at Bamberg;[4] and the "Evangelistarium of Illinus" in Cologne Cathedral.

* * *

Just as in former days the conquest of the Lombard kingdom by Charles the Great (774), so now the descent upon Italy (951) of Otto the Great (936–973), with the double object of comforting the lovely and not inconsolable widow of Lothair (946–950), Adelaide of Burgundy, and of renewing and strengthening the Carolingian claims to the Imperial dignity, consummated by his coronation as King of Italy (961) and Emperor (962), was the opening for Germany of an era of building activity, though not so brilliant as the first. It derived its sustenance from the free and direct communications re-established with Italy, an intercourse which continued through the reigns of Otto II (973–983) and Otto III (983–1002), with the latter of whom we conclude this section, as we have devoted a separate chapter to the ecclesiastical architecture of Germany subsequent to the epoch of 1000.

[1] St. Gall. Library of the old abbey.
[2] Berlin. Library of the Museum of the Decorative Arts.
[3] Zurich. Cantonal Library.
[4] Bamberg. Royal Library.

THE ABBEY CHURCH OF ST. CYRIACUS AT GERNRODE was built by the powerful Margrave Gero († 968), born in 890.[1] It was quite complete in 968 (some say in 961 [2]), so that the founder on his return from Rome, where he had deposited his armour near the altar of the Prince of the Apostles, and had received from the pope a relic of St. Cyriacus, was able to install the first abbess.[3]

Fig. 745.—Gernrode. Church of St. Cyriacus. Capital (XIIth Century).

The plan is that of a T-shaped basilica with nave and aisles having apsidal endings, the transept being very short, as in the early Roman basilicas. It has an apse at either end. That at the west was rebuilt in its present form in the XIIth century,[4] but originally, no doubt, was of the modest type of the western apse at Drübeck (877) which seems to have been rebuilt between the XIth and XIIth centuries. It is flanked by two towers.

The skeleton of the outer walls of the original church remains, here and there rebuilt, and altered by the subsequent construction of the triforium, when the arcades of the nave with their pillars were remade and the windows altered.

In the interior, the eastern apse has a semi-dome, while the presbytery, like all the rest of the church except the minor apses, western apse, and both crypts, has a wooden ceiling.

Under the chancel is the crypt, roofed with a combination of rough unraised cross vaulting and continuous barrel vaulting springing directly from the outer walls, and supported in the centre by four piers with clumsy bases and rude moulded capitals.

The floor of the transept was raised by the insertion of an arcaded and vaulted gallery. The nave is now separated from the aisles by four arches on either side supported by two columns with a pier between them. The piers have moulded capitals: the columns, on the other hand, are crowned by Corinthianesque capitals with stiff, plain foliage with occasionally heads coming out of it (Fig. 745). They have curious bases made up of rolls and hollow mouldings.

Under the western choir apse is a crypt with continuous cross vaulting supported by columns with bases which in some cases have spur-leaves at the angles, recalling those in St. Michael and St. Godehard at Hildesheim; while the capitals are of the Lombardic cubical type, ornamented on the plane surfaces with concentric grooving and pairs of semicircles, or with foliage. The capitals are sometimes replaced by corbel pulvins, chamfered and curled over at the ends.

Fig. 746.—Gernrode. Church of St. Cyriacus. Pulvin (XIIth Century).

The triforium has, on the nave side, columns with piers between them bearing similar corbel pulvins (Fig. 746), the prototypes of which are to be found at Mettlach; while at the two ends it has pairs of openings with plain or foliated funnel-shaped capitals.

[1] Puttrich, *Denkmale der Baukunst des Mittelalters in Sachsen.*
[2] Lübke, *op. cit.*
[3] *Mon. Germ. hist.—Thietmarus, Chronicon.*
[4] Dohme, *op. cit.*

The original windows are round-headed and splayed on both sides. The exterior of the eastern apse is marked off into two horizontal zones by a rude stringcourse, and into three vertical compartments by pilasters and engaged shafts.

Whether the western towers (Fig. 747) were originally intended for staircases

Fig. 747.—Gernrode. Church of St. Cyriacus (Xth and XIIth Centuries).

or for the bells, is impossible to say, as the highest stage with its two-light openings is the result of an alteration. The lowest part, like the eastern apse, is marked out by thick lesenas. The next stage, however, is decorated with arcading, both triangular and round-headed. Both stages are lighted by single rectangular openings with

triangular or arched tops. The western apse with its blind gallery and west front have replaced the original arrangement.

The masonry and artistic details of the church indicate three separate series of building operations. Of the first of these, characterized by the rude art of some of the mouldings, and an entire absence of ornament, we have already spoken. To the second should, in my opinion, be assigned: the triforium galleries with the new arcades which support them, the galleries in the transept, and the reconstruction of the apsidal west front. The artistic details presented by these portions are separated by a considerable interval from those of the age of Gero, and are occasionally superior to the results at Quedlinburg. This second period may be placed at about the middle of the XIIth century, and with it we may associate the font. I append an illustration of one of its panels (Fig. 748).

Fig. 748.—Gernrode. Church of St. Cyriacus. Detail of font (XIIth Century).

To the third, that is to say to the second half of the XIIth and the beginning of the following century, will belong the gallery for the nuns on one of the sides, on account of the way in which the cross vaulting is constructed, and the greater artistic refinement shown in the capitals of its supports.

Gernrode is the earliest existing example in Germany of a church with an apse at either end. A still older one, however, was the abbey church of Fulda, the rebuilding of which was begun between 790 and 792 by Abbot Baugolf (779–802), continued by his successor Ratger (802–818) ("sapiens architectus"[1]), and finished by Eigil (818–822). It was dedicated in 819, and destroyed by fire in 937.[2][3][4][5] We learn that it was formed by two basilicas set end to end but separated by a transept,[6] and that each apse had a crypt beneath it: "In eadem vero ecclesia duas cryptas magnifico opere conlocavit, unam quae respicit solis ortum, alteram quae solis occasum intendit."[7] We are even told the name of the architect of these crypts, the monk Racholfus: "Racholfo dictante magistro et monacho."[8]

Other earlier instances were the abbey church of St. Gall (822–829), the cathedral of Cologne as built by Hildebold (785–819) and finished or restored by Willibert (870–889), and the cathedral of Hildesheim, erected by bishop Alfred (851–874), and dedicated in 872,[9] which had a crypt at either end and therefore two apses facing one another.[10] In other countries a very early example was to be found at Abingdon Abbey (675); and it may very well be that the architect of Fulda was influenced by the English Benedictine model, just as later the designer of St. Cyriacus

[1] *Mon. Germ. hist.—Catalogus abbatum Fuldensium.*
[2] *Mon. Germ. hist.—Annales Fuldenses antiqui.*
[3] *Mon. Germ. hist.—Lambertus, Annales.*
[4] *Mon. Germ. hist.—Annales Sancti Bonifacii.*
[5] *Mon. Germ. hist.—Annales Hildesheimenses.*
[6] Browerus, *Fuldenses antiquitates.*
[7] *Mon. Germ. hist.—Brun Candidus, Vita Eigilis abbatis Fuldensis.*
[8] *Mon. Germ. hist.—Brun Candidus, De vita Aegili versibus explicata.*
[9] *Mon. Germ. hist.—Annales Hildesheimenses.*
[10] Bertram, *Geschichte des Bisthums Hildesheim.*

may have derived his plan from St. Gall, which also suggested the round towers on either side of the western apse.

In addition to this it contains the earliest dated double splayed windows in Germany. Those in the round church at Fulda (818–822) are not original. This form of opening, the history of which we traced in our account of Bagnacavallo (VIth century), and to which a wide extension had been given by the Lombard gilds, had already made its appearance north of the Alps, in the Frankish Empire in the apse at Germigny des Prés (801–806); and also in England in St. Michael's Church, St. Albans (about 950).

Gernrode further affords the first instance for Germany of towers treated with a scheme of architectural decoration in the Lombardic manner, the prototype being the campanile of San Satiro at Milan (876), and likewise of apses marked off into horizontal zones and divided vertically into compartments by lesenas and wall-shafts. All of them were ideas imported from Italy, but carried out with such taste and ability as the Teutonic craftsmen possessed. The fact is, the lesenas and shafts are applied to the apse not merely as buttresses, as they were in Roman times, but for decorative reasons. Italian churches of that age provided numerous instances of apses embellished with one or two tiers of lesenas and corbel arches. Some of the earliest, to which we have called attention, are those at Arliano (712–744), Toscanella (739), and San Leo (881–882); which last was, no doubt, seen by Otto the Great when, after a long and desperate resistance, he stormed the fastness, and probably also by his right hand, the valiant Gero.

Fig. 749.—Mettlach. Abbey Church (987).

No country outside Italy exhibited towers embellished with lesenas, arched corbel courses, and blank arcading, older than those at Gernrode. And though the scheme applied was of foreign origin, a partly Teutonic character was given to it, suggested by the ranges of arcading on the sepulchal chapel of Lorsch.

The Abbey Church of Mettlach was erected by Lutwinus the first abbot, afterwards archbishop of Trier (695–713), in honour of the Virgin. It was rebuilt by Hezzel on the model of the monastery church of St. Maximin, in the time of Archbishop Egbert (977–993), and soon afterwards reconstructed by Lioffinus (987), (Fig. 749 and Frontispiece) in imitation of Charles the Great's rotunda: "et Aquisgrani palacium mittens et exinde similitudinem sumens, turrim, que adhuc superest, erexit."[1][2][3][4]

In the upper story or triforium may be noticed Pre-Lombardic cubical

[1] *Mon. Germ. hist.—De rebus Trevirensibus saec. VIII–X libellus.*
[2] *Mon. Germ. hist.—Ex miraculis S. Liutwini, auctore monacho Mediolacensi.*
[3] Sammartano, &c., *Gallia cristiana—Ecclesia Trevirensis—Mediolacus.*
[4] Hontheim, *Historia Trevirensis diplomatica et pragmatica.*

capitals hollowed out at the angles, and with a flower or other ornament on a console projecting from the abacus. Others have the form of a simple cube (Fig. 750), or are shaped like an inverted truncated cone. These capitals, decorated with conventionalized vine branches, foliage, and interlacing, fairly successfully treated though of monotonous design and frigid execution, carry very depressed corbel pulvins carved with foliage, or in some cases plain and curled over at the ends. The carvings on the pulvins recall those in the underground apsidal chapel of St. Servatius at Quedlinburg (997–1021).

A noticeable feature in the church are the corbel pulvins with rudely curled ends. They are derived from the crutch-shaped pulvins, a Lombard creation of the Xth century, which make their first appearance in the towers of the cathedral of Ivrea (973–1001 or 1002). These are the oldest dated examples that I know, and are important for purposes of comparison, being earlier than the chamfered specimens at Gernrode or those of similar form in the round church at Fulda.

Fig. 750.—Mettlach. Gallery (987).

TRILATERAL CHOIR AND CRYPT IN THE ABBEY CHURCH AT ESSEN.—The abbey church of Essen was founded by Alfred, bishop of Hildesheim (851–874), between 858 and 863, and was finished in 873.[1] [2] We may infer from what survives that it consisted of a basilica with nave and aisles, a very short transept, and central and lateral apses.

The date at which the well-known three-sided choir at the west end with its façade was added is not known. It is generally believed to have been in the time of the abbess Matilda (973–1011); but my view is that it was constructed when the convent was rebuilt by the abbess Theophanu (1039–1056). Her memory remained closely connected with the convent of Essen: "unde ibidem eius memoria semper in benedictione erit."[3] On the same occasion the crypt was altered and extended eastwards. It was consecrated in 1051 by Hermann II, archbishop of Cologne (1036–1055).[4]

The three sides of the choir (Fig. 751) have on the ground floor arches springing

[1] Humann, *Die Kunstwerke der Münsterkirche zu Essen.*

[2] Leibnitius, *Scriptores Brunsvicensia illustrantes—Chronica episcoporum Hildensheimensium, necnon abbatum monasterii Sancti Michaelis.*

[3] *Mon. Germ. hist.—Brunwilarensis monasterii fundatio.*

[4] Humann, *Die Kunstwerke der Münsterkirche zu Essen.*

from piers copied from those in the rotunda at Aachen. The capitals in the gallery above are Corinthian (ancient, and taken from Roman structures), Corinthianesque with stiff, plain leaves and a dentilated course round the top, and freely treated Ionic. Contemporary specimens of the Corinthianesque type are to be found on the façade (Fig. 752), which also contains examples of the Lombardic cubico-spherical pattern: a fact which connects together the eastern part of the crypt, the west front, and the atrium through which it is approached.

Fig. 751.—Essen. Abbey Church. Trilateral choir (1039–1056).

The crypt under the eastern choir is the work of two distinct periods. To the first belongs the central part with its plain piers, to the second the two ends which have their supports embellished with angle shafts and fluting. The greater amount of ornament on the eastern supports is explained by their proximity to the altar.

The earlier of these periods corresponds to the time of the abbess Matilda. As a matter of fact we know that, after the fire of 944 or 946, which must have necessitated some restoration, a dedication of the crypt took place.[1] The second period will be that of the abbess Theophanu. Any one who compares the carving on the capitals of the piers at the east end with the Ionic capitals and bead-and-reel moulding in the gallery of the western choir will at once see such intimate relationship both in design and execution that they may be regarded as contemporary. This point established, these carvings cannot belong to the epoch of about 1000 for the three following reasons.

(1) The form of cubical capital on the piers at the east end of the crypt is decisive against that date, for the Lombardic cubico-spherical capital did not appear in Germany till later. The date of its appearance at Essen is given by the capitals in the western atrium of the church which forms part of the great works of Theophanu.

(2) The form of the capitals in the rotunda at Mettlach, and the type of their ornamentation, are evidence of the way in which capitals were treated in Germany

[1] Humann, *Der Westbau des Münsters zu Essen.*

at the end of the Xth century. This manner is quite different from that of the Ionic, Corinthianesque, and cubico-spherical specimens, to be found in the crypt, west front, and atrium of the church at Essen.

(3) The west front of the three-sided choir exhibits an arched corbel course. The earliest example of such a feature (either in the continuous form or divided into sections by lesenas) in Germany is to be found in the abbey church of Limburg (1024–1045–1058). One might suspect that it was due to Italian builders, who, according to some,[1] were responsible for the whole structure. We cannot, however, admit that Italian craftsmen had any share in the work, for the methods of construction and the treatment of capitals in Italy at the end of the Xth century were not of this character.

Fig. 752.—Essen. Abbey Church. Trilateral choir (1039–1056).

We must accordingly date this carving, and consequently the alteration of the crypt and the erection of the three-sided choir and west front, in a period subsequent to the time of Abbess Matilda, in other words in the days of Theophanu, about whose works of restoration and enlargement we possess definite information:—"E quibus,Theophanu, virum se moribus agens, Asidense monasterium cum universis eius officiis iam partim vetustate collapsis, ab ipsis fundamentis novo erigens opere, mirabiliter amplificavit."[2] These works must have included the whole of the conventual buildings, and necessarily, or rather essentially, the church as well; for it is notorious that in the Chronicles "monasterium" has the meaning of "church."

[1] Humann, *Die Kunstwerke der Münsterkirche zu Essen.*
[2] *Mon. Germ. hist.—Brunwilarensis monasterii fundatio.*

CHAPTER VII

THE LOMBARDO-RHENISH STYLE

WHILE the Lombard gilds in Italy were seeking by repeated experiments to give an embodiment to their conception of a vaulted church, and while in France the Benedictine Order was striving after a solution of the problem how to cover every part of churches of large size with cross vaulting, the master builders of Germany were concentrating their efforts, one may say exclusively, on the creation of a peculiar ground plan. That plan, taken together with the severe character and imposing form of the structure raised upon it, was intended to endow with an Imperial dignity the Lombardo-Rhenish basilica, the highest expression of German architecture in the XIth and XIIth centuries. It was an outward and visible sign of the Imperial idea, brought back to life among the Teutonic peoples by Otto the Great (936–973), and not only affirmed but also made good in a greater or less degree by his successors.

No one can look on the imposing towered piles of the cathedrals of Mainz, Speyer, and Worms, or the solemn naves of their interiors, without being immediately impressed by this fact. And so forcible is the result that, had the original conceptions been carried through, and had their authors been able to combine grandeur of architectural form with the wealth of ornament exhibited by contemporary buildings in Italy, and also with the constructive and statical knowledge of the Lombard gilds, there is no ecclesiastical edifice of the XIth and XIIth centuries which would have stood the test of comparison with them; excepting always the church of Abbot Hugo at Cluny (1089–1130), standing unrivalled in its consummate majesty and pride.

Satisfied, however, with a single aim, the northern builders of the grandest German churches, though in direct contact with Italy and considerably influenced by Italian architecture, and though at times availing themselves of the services of her craftsmen, took absolutely no interest in a rational and original solution of the problem how to cover their structures with cross vaulting. By such a solution they might have contributed towards the development and completion of the architecture which immediately precedes the Pointed style, and was its source and origin.

Hence it is only at the beginning of the second thirty years of the XIIth century that we find them making their first attempts to substitute cross vaulting for flat ceilings over the wider spaces. An exception must be made in the case of the abbey church at Laach, where the vaulting of the main spans must be explained as an imitation, which was unique, of the Cluniac abbey of Vézelay (1096–1104). And this at a time when the Lombardic style had attained its completion in San Michele Maggiore at Pavia, erected after the earthquake of 1117, and when Durham had seen between 1129 and 1133 the combination of the pointed arch with diagonally ribbed

cross vaulting, and while in France the Transition, which opened the way for the Pointed style, had already made its appearance. The latter was soon moulded by the German School after its own fashion and to its own glory, reaching its culmination in the new cathedral of Cologne (1248). All which forms the subject of the present chapter.

THE ABBEY CHURCH OF ST. MICHAEL AT HILDESHEIM was begun by Bishop Bernward (993–1022), but the precise year is not known. In 1015 the crypt was ready, and was dedicated. The church was consecrated by the bishop in the year of his death, but it was only completed by his successor, Godehard (1022–1038), who performed the dedication in 1033. In 1034 it was struck by lightning ("monasterium S. Michaelis archangeli fulmine combustum et miserabiliter est deterioratum"), and restored by Godehard with a fresh consecration in the next year, which shows that the damage done was inconsiderable. Injured by another fire, and beginning to suffer from the effects of time, it was repaired and altered by Abbot Diedrich II in the days of Bishop Adelogus (1171–1190), who in 1186 consecrated it once more.[1] [2] [3] [4] [5] [6]

Fig. 753.—Hildesheim. Crypt of St. Michael's (about 1010–1015 and 1171–1186).*

The church as originally designed had a nave with aisles, separated by a transept from the apse at either end. The transepts were flanked by staircase turrets, and over either crossing rose a large tower. Beneath the western choir apse is a crypt where the capitals of the piers which support its roof are formed of a fillet and hollow moulding or an ovolo (Fig. 753). The two

* The illustrations of Hildesheim are from photographs taken by Herr F. H. Bödeker.

[1] *Mon. Germ. hist.—Annales Hildesheimenses.* [2] *Mon. Germ. hist.—Chronicon Hildesheimense.*

[3] *Mon. Germ. hist.—Thangmarus, Vita Bernwardi episcopi Hildesheimensis.*

[4] *Mon. Germ. hist.—Wolferius, Vitae Godehardi episcopi Hildesheimensis.*

[5] Leibnitius, *op. cit.—Chronica episcoporum Hildensheimensium.*

[6] Bertram, *Geschichte des Bisthums Hildesheim.*

columns with Lombardic cubico-spherical capitals on either side of the present outer doorway come from the upper church. In its midst lies the limestone sarcophagus which the founder had ordered for himself during his lifetime. The bas-reliefs which decorate the coped cover should be noticed, especially those of living creatures, among which only the lamb with the cross on one of the gable ends is fairly successful. The angels between tongues of flame or clouds on the sides of the cover are very rude work.

The western choir apse is the result of a reconstruction attributed to Adelogus. The north arm of the transept is occupied by a platform supported by rude unraised continuous cross vaulting, above which are two galleries one over the other (Fig. 754). In them may be seen cubico-spherical capitals surmounted by deep abaci or rude corbel pulvins.

Fig. 754.—Hildesheim. St. Michael's. North arm of western transept (about 1015–1035).

This cross vaulting with that in the crypt brings to mind the beautiful contemporary vaulting with visible arches in the crypt of San Miniato al Monte near Florence (1013), and shows what a far higher level the art of vaulting had reached in Italy in the XIth century than in Germany, or indeed in any country north of the Alps.

This transept communicates with the north aisle by two arches supported by a column with a Lombardic cubical capital. The south arm of the transept has lost its end and staircase turret, but it has kept the two arches separating it from the corresponding aisle (Fig. 755). The three arches which divide it from the crossing are not original.

The eastern choir has disappeared, together with the subordinate lateral apses, but the transept in front of it remains. Four great arches carry the central tower, which has been altered. In the south arm of the transept the capital of the column supporting the two arches leading into the aisle has its faces and angles ornamented with spear heads.

Fig. 755.—Hildesheim. South aisle of St. Michael's (about 1015–1035 and 1171–1186).

The nave is separated from the aisles by columns, between every two of which comes a quadrangular pier. The piers are original. Of the columns only two still retain their original cubico-spherical capitals and unspurred bases. The others have capitals of the time of Adelogus (Figs. 756, 757), which, with their abaci, are elaborately ornamented with scroll work, foliage, sacred and profane figures, animals, &c. Their bases are provided with the characteristic spur leaves at the angles, which occur so often in Germany.

Except for the vaulted platforms in the transepts (and no doubt the half-domes of the apses) the whole church had wooden ceilings.

St. Michael's (Fig. 758) is not only an important monument for the history of

Fig. 756.—Hildesheim. Capital in the nave of St. Michael's (1171–1186).

Fig. 757.—Hildesheim. Capital in the nave of St. Michael's (1171–1186).

art, but also contains more than one characteristic feature. Some of these—certainly the Lombardic cubico-spherical capital—had an important share in the formation of the Lombardo-Rhenish style; and this is why we include the church in our list of Rhenish buildings, though it belongs geographically to Old Saxony.

We notice, in the first place, the plan of a double transept flanked by staircase turrets, with a central tower over each crossing. Other churches before Bernward's had been erected with two transepts, and one or even two central towers; for instance, Saint Riquier (Centula) (793–798), and Saint Remy at Rheims (VIIIth and IXth centuries). But these had not the flanking towers with which St. Michael's was provided.

Fig. 758.—Hildesheim. St. Michael's (about 1015–1035 and 1171–1186).

Next, we notice the arrangement of an arcarded platform or portico at the end of the transept. It had been introduced in the case of the great transept of Constantine's Vatican Basilica (Fig. 759). In the portico to the right Pope Damasus (366–384) constructed his baptistery, while the one to the left contained chapels and the tomb of Urban II (1088–1099). In Bernward's church, however, these transept porticoes were surmounted by galleries.

The arrangement in St. Peter's influenced at a later date the architect of Cerisy la Forêt (1030–1066), from which it was copied in other Lombardo-Norman churches. It was also present to the mind of the patriarch Poppo (1017 or 1019–1042 or 1045) when building his cathedral at Aquileia, for the two arches still existing in either arm of the transept were evidently intended originally not only to strengthen the lofty transept walls but also to support two loggias which probably disappeared in the restoration and alteration of the church by the patriarch Marquard between 1365 and 1381.

Another feature is the alternation of piers with columns, not in this case an

advance in the direction of the Lombardic church, but merely providing a firmer support for the lofty and substantial nave walls. This expedient (an early instance occurs in St. Demetrius at Salonica [Vth century]) we have discussed in our account of Jumièges. It was introduced at Hildesheim under the influence of the Lombardic movement, at that time specially active in Italy and France. Shortly before, it had been employed in SS. Felice e Fortunato near Vicenza (985). And while St. Michael's was in course of erection, a far more advanced scheme was being embodied in San Miniato al Monte near Florence (1013) in the form of an alternation of columns and compound piers from which started longitudinal and transverse arches. The result was a sound and well thought out concatenation of the entire structure.

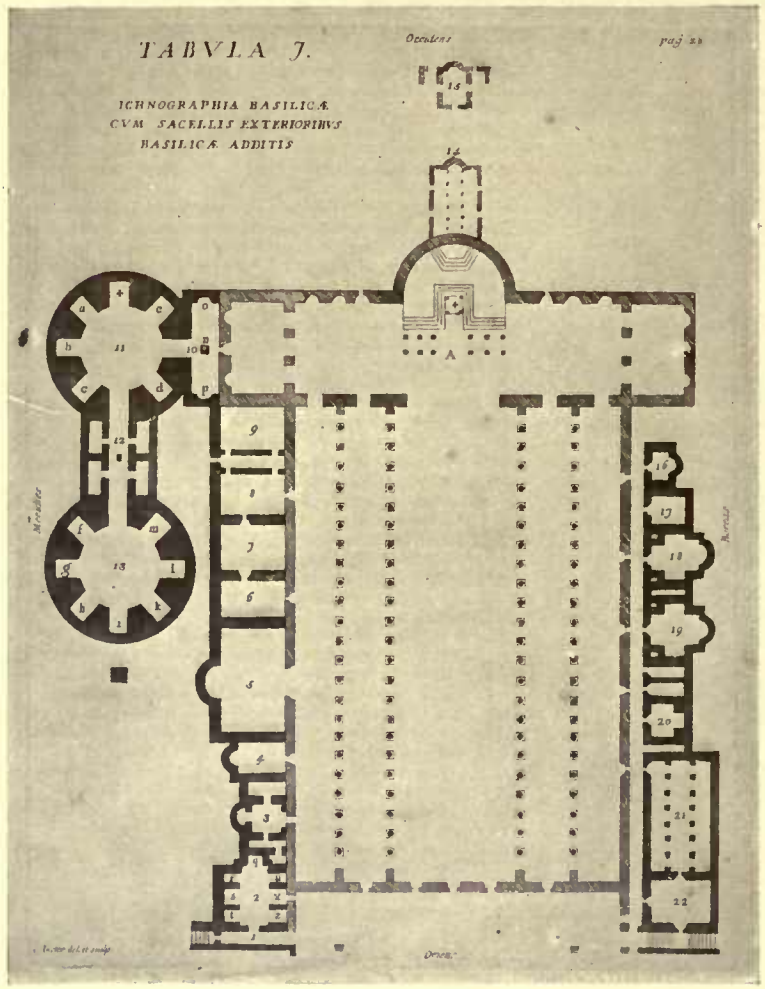


Fig. 759.—Rome. Plan of the Old St. Peter's (IVth Century). (*From Bonanni, "Templi Vaticani Historia."*)

Then we have to remark the presence of the Lombardic cubico-spherical capital. Its introduction here must be later than 1015, for in that year only the crypt of Bernward's church was finished and dedicated, and the capital does not appear in it.

I ought to notice here that the date of 1001 as the beginning of the constructive works at Hildesheim is wrong. They cannot have been started earlier than about 1010, for it is inconceivable that the foundations took so long to construct. Certain it is that the choir above the crypt, the body of the church, and the eastern choir, must have been erected between 1015 and 1022, for it was only then that they were dedicated, and it was the dedication of an unfinished building: "et ex parte dedicavit."[1] The church was not finally completed till 1033, when a fresh consecration took place.[2]

[1] *Mon. Germ. hist.—Chronicon Hildesheimense.*
[2] *Mon. Germ. hist.—Wolferius, Vita Godehardi episcopi Hildesheimensis.*

We discussed the origin of the cubico-spherical capital when dealing with Sant' Abondio at Como. We may refer here to its rapid diffusion in the German lands, where it kept the carvers busy for two whole centuries, and was only dispossessed by the Pointed style. And it preserved its form unaltered, it being very rare to find in Germany the scalloped type. In German illuminated MSS. I have never come across any representation of the cubico-spherical capital till well on in the XIth century. I may refer to the "Sacramentarium S. Gregorii Papae" (1052–1078) in the Royal Library at Bamberg, where it is depicted in an arcade.

Before leaving this interesting church, I should like to say a few words about various important works of art ascribed to the school founded at Hildesheim by Bernward, and carried on under his direction. The productions of this school appear to me to be in part the result of arbitrary attributions; and it is desirable that they should be subjected to a fresh examination by some one who has made a special study of the subject, and would treat them as a whole with the aid of new criteria and a comparative method based on immediate knowledge of contemporary work of the same class both Eastern and Western. Meanwhile I shall confine myself to some observations on the celebrated bronze doors of the narthex of the Cathedral, and the equally celebrated portion of a candelabrum (Fig. 760) of the same metal (with a new top added in the last century) which is in the church.

It is suggested that Bernward derived his idea for the doors, with the story of Adam and Eve on the left side and scenes from the life of Christ on the right, from those of Santa Sabina at Rome, also having subjects from the Old and New Testament, which he must have seen and admired when, in 1001, he was the guest of the Emperor Otto III in his castle on the Aventine. In the same way, the candelabrum, with its spiral band of scenes, was inspired by the Column of Trajan.[1] Unfortunately there is no mention of these works (which, it has been recently noticed,[2] show such different treatment of the figures) by Thangmarus, the bishop's contemporary biographer and tutor; nor is it stated that the doors made by Bernward, and afterwards set up in the cathedral by Godehard,[3] are identical with those before us. We might just as well assert, and with more foundation, that the spiral candelabrum, the supposed "columna aenea" of Bernward,[4] is one of the "duo candelabra longa" which Adelogus gave to his cathedral.[5]

Nor must we put too much reliance on the inscription on the two middle bands of the doors, put there it is not clear

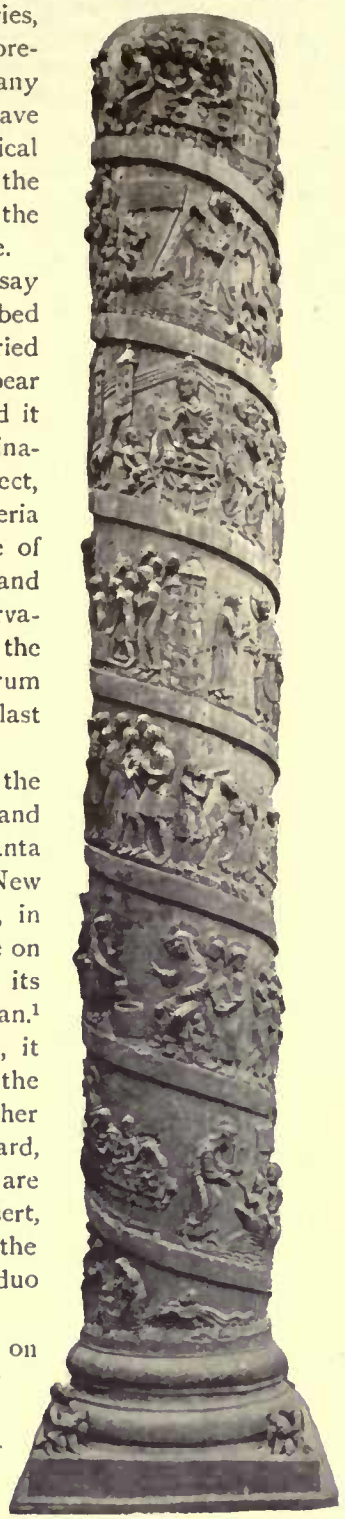


Fig. 760.—Hildesheim. Candelabrum in the Cathedral (about XIIth Century)

[1] Grisar, *Analecta Romana.*

[2] Humann, *Zur Beurtheilung mittelalterlicher Kunstwerke in Bezug auf ihre zeitliche und örtliche Entstehung.*

[3] *Mon. Germ. hist.—Wolferius, Vita Godehardi.*

[4] Leibnitius, *op. cit.—Chronicon coenobii S. Michaelis in Hildesheim.*

[5] *Mon. Germ. hist.—Chronicon Hildesheimense.*

when, for it is improbable that they would have been cast and fixed in place in 1015 when St. Michael's was not yet built. I believe that this inscription is of a piece with the one on the great bell at Rivolta d'Adda (XIth century) stating that the bell-tower was added to the church in the Xth century, when the latter was not in existence.

Any one who compares the reliefs on the doors and candelabrum with the carvings on Bernward's tomb in the crypt of St. Michael's will not fail to realize the enormous interval between the artists responsible for the bronze work and the sculptor of the sarcophagus, or to be convinced of the impossibility of their being all of one date and the products of a single school. Not to speak of the fact, which no one has yet noticed, that the candelabrum was designed with figures at the angles of the base, though such appendages to the lower torus of a column base did not reach Germany from Italy, where they originated in the Xth century, before the second half of the XIth century in the simple form of claws. And the monuments show that it was not used by the School of Hildesheim till the XIIth century. On the other hand, the rude carvings of the sarcophagus ill consort with the far more advanced reliefs on the bronze cathedral doors; and it is not likely that the feeblest member of the school would be selected to execute the tomb of its founder and master.

If I may hazard an opinion, taking account of the figures on Adelogus's capitals in St. Michael's, which are less advanced than those of the candelabrum, and still less so than those on the cathedral doors, and bearing in mind the numerous XIth and XIIth century carvings and stucco work which we have examined in Germany, I am inclined to think that the candelabrum, if executed by German artists at all, belongs, at the earliest, to the last years of Adelogus's episcopate, and that the doors were not cast before the XIIth century, in view, among other things, of the treatment of the nude which indicates an advanced stage of art.

Fig. 761.—Strassburg Cathedral. Choir (XIIth Century).

STRASSBURG CATHEDRAL, rebuilt by Bishop Werinherus of Hapsburg (1001–1029) in 1015, but only finished after his death, about the year 1031,[1][2] would have furnished, had it survived, an important link in the chain of monuments which produced the Lombardo-Rhenish style. As it is, the reconstruction following on the repeated conflagrations between 1130 and 1176 spared next to nothing of that bishop's church; that is to say, merely building

[1] *Mon. Germ. hist.—Annales Argentinenses.*

[2] Dacheux, *La cathédrale de Strasbourg.*

materials used, for instance, in the oldest part of the crypt. It is true that it has been suggested that a portion of the XIth century structure may be recognized in the crypt under the choir (Fig. 761), planned like a miniature basilica with nave and aisles separated by cruciform piers alternating with columns, with a barrel vault over the central part, and cross vaulting in the aisles. There is, however, no truth in this, for not only is the system of vaulting against it, but even more, the artistic features of the supports. In fact the Lombardic capitals with scroll work and well-rounded figures treated in high relief are obviously later than the carving in San Flaviano at Montefiascone (1032); and I feel sure that no one familiar with the decorative carving of the first centuries after the epoch of 1000 would date these figure capitals in the age of Bishop Werinherus. Moreover, we shall presently see what was the manner of carving capitals both in crypts and churches, in the Rhine lands, in and about the bishop's time.

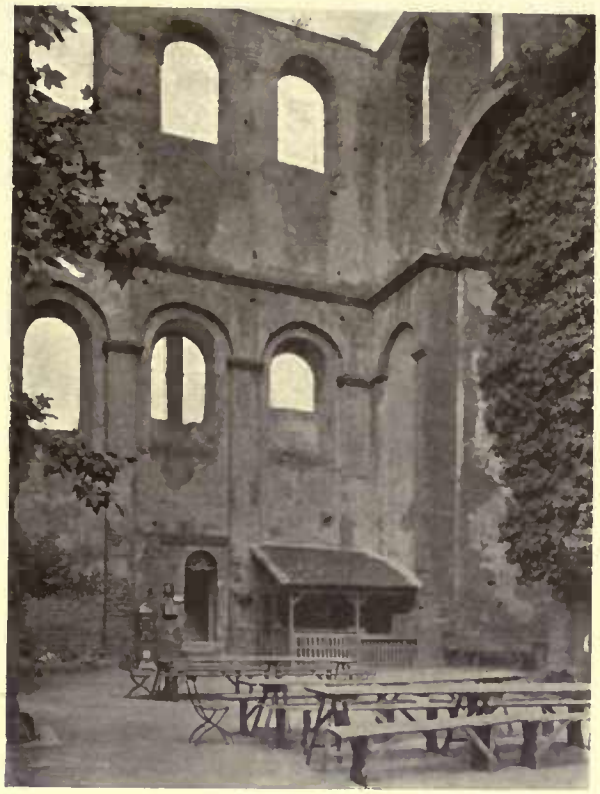


Fig. 762.—Limburg. Abbey Church. North arm of transept (1024–1045–1058).

THE ABBEY CHURCH OF LIMBURG was due to the Emperor Conrad II (1024–1039), who entrusted Abbot Poppo (1020–1048) with its erection. There are conflicting notices as to the date of foundation, with the result that Trithemius[1] puts it in 1024, Würdtwein[2] in 1030, Bucelinus[3] in about 1031, and Browerus[4] in 1034. The choir altar was dedicated in 1039, and in 1040 the high altar in front of the choir. In 1041 the crypt was finished and three altars consecrated in it.[5] The church was completed under Henry III (1039–1056);[6] to be exact in 1045[7] or 1058,[8] when it was dedicated. The architect was the monk Gumbertus († about 1036).[9][10]

We will select the date 1024 for the foundation, as best suiting the conditions of ecclesiastical architecture in Germany in the first quarter of the XIth century, when churches on a large scale still had wooden roofs for the aisles, whereas shortly afterwards they were occasionally, in the Rhine lands, covered with cross vaulting.

[1] *Opera historica—Chronica insignis monasterii Hirsaugiensis.*
[2] *Monasticon Palatinum—Limburgum ad Hartam monasterium Ord. S. Benedicti.*
[3] *Germania topo-chrono-stemmato-graphica sacra et profana.*
[4] *Antiquitates et Annales Trevirenses.*
[5] Würdtwein, *op. cit.—Limburgum ad Hartam monasterium Ord. S. Benedicti.*
[6] *Mon. Germ. hist.—Annales Spirenses.*
[7] Würdtwein, *op. cit.—Limburgum ad Hartam.*
[8] *Mon. Germ. hist.—Deutsche Chroniken—Limburger Annalen.*
[9] Sackur, *op. cit.*
[10] Manchot, *Kloster Limburg an der Haardt.*

Nothing more than ruins of the abbey survives. The church had a cruciform plan with nave and aisles, the former terminating in a square chancel flanked by two apses projecting from the transept (Fig. 762). At the west end was a narthex between two towers, to each of which a round staircase turret was attached. The nave was separated from the aisles by two rows of columns with Lombardic cubico-spherical capitals, ending with two massive cruciform piers which, with the responds of the chancel walls, carried the square central tower.

A restoration of the basilica which has been published [1] shows an octagonal cupola rising above the crossing. It is due to the author's imagination, for the nave and aisles, transept, and even the chancel, had wooden roofs, as is obvious to any observer, and therefore the lantern tower over the crossing can only have had a similar covering. An octagonal cupola carried on pendentives would have been an impossibility with the construction of the church such as it was.

Fig. 763.—Limburg. Abbey Church. Crypt (1024–1045–1058).

It is true, indeed, that an erroneous interpretation of a passage in an incomplete description of the church printed in Würdtwein,[2] has given rise to the idea that the aisles had barrel vaults. There is, however, not the least trace of an impost course on the aisle walls, and they are not provided with the supports for the transverse arches which would have crossed the vault at intervals and given it stability.

Underneath the chancel was a crypt with cross vaulting (Fig. 763). The whole building was decorated with blank arcading, lesenas, and arched corbel courses.

The distinctive feature of the church is the arrangement of western towers with staircase turrets attached ; an idea apparently derived from Saint Riquier, where the two central towers had similar adjuncts. The transept apses, not set exactly in the line of prolongation of the aisles, are copied from the normal Lombardo-Norman basilica. They had already appeared at Bernay. Lombardic influence is suggested by the decorative use of the arched corbel course. This is the earliest dated instance of its appearance in Germany.

[1] Manchot, *op. cit.* [2] *Op. cit.—Limburgum ad Hartam monasterium Ord. S. Benedicti.*

THE CHURCH OF ST. MARIA IM CAPITOL AT COLOGNE, founded about the year 700 by Plectrudis, consort of Pippin II († 714), was rebuilt in the first half of the XIth century, and consecrated by Leo IX (1049–1055) in 1049.[1][2][3][4] The latter fact is confirmed by the actual presence of the Pope in Cologne at the time, and also by the existence of a Bull of Leo's in a Register among the archives of the church, granting indulgences to it.

The rebuilding must have taken place in the period intermediate between the erection of the abbey of Limburg (1024) and that of the cathedral of Speyer (1030), on account of the form of the supports and the vaulting of the aisles.

Fig. 764.—Cologne. St. Maria im Capitol. Nave (1049).

As designed in the XIth century, the church consisted of a basilica with nave and aisles, a three-lobed choir surrounded by ambulatories and a western tower flanked by staircase turrets. The original outline is shown by the uniform character of the masonry in the portions of the old facing to be seen in the western towers, nave, transept, and apses.

The arrangement of the western towers must have been just then the fashion in Cologne, for we read in Gelenius[5] that Archbishop Anno II (1056–1075) built two towers at the west end of Great St. Martin's.

The nave arcades (Fig. 764) have rectangular piers with engaged columns. The roof was originally of wood, but it has been replaced by vaulting. The aisles, strengthened on the outside by buttresses connected at the top by arches, have unraised cross vaulting. At the ends of the aisles are two polygonal towers,

[1] Gelenius, *op. cit.*
[2] Schaefer, *Das Alter der Parochie S. Maria im Kapitol* (*Annalen des hist. Vereins f. d. Niederrhein*, 1902).
[3] Id., *Beiträge zur Kölner Topographie und Kirchengeschichte* (*Köln. Quartalschr.*, 1904).
[4] Board, *S. Maria im Kapitol zu Köln.*
[5] *Op. cit.*

originally quadrangular at the base and polygonal in the upper part, flanking the old nuns' choir, which was rebuilt after the fall of the western tower in 1637, and partially enclosing the bell-tower in the middle of the west end. This tower, closely bonded in its lower part into the nave walls, formed the narthex from which the nuns' choir was entered through two doors in the staircase towers, now blocked up. We may conjecture that it was raised in 1170, and so would be the bell-tower which, according to Gelenius,[1] collapsed through decay in 1637.

The three-lobed choir (Fig. 765) has suffered from alteration which has affected the whole of the sanctuary and the upper part of the transept, to which vaulting has been added. It had, from the first, an ambulatory forming a continuation of the aisles, and covered with cross vaulting which is old in the transept but reconstructed in the sanctuary. Whether it had a crypt from the beginning is not known. The

Fig. 765.—Cologne. St. Maria im Capitol. Choir (1049 and XIIth Century).

present one contains, indeed, supports just like those in the church, but it is impossible to say with certainty whether the cross vaulting is of the XIth century or the XIIth.

It has been suggested[2] that all this eastern part of the church was at first designed with cross vaulting in the ambulatory, half-domes for the apses, barrel vaulting for the presbytery and transept, and a cupola rising immediately from the arches of the crossing. The nave would have had a wooden roof. The tampering to which this part of the church has been subjected does not allow of any certain decision about such theories. To form one would necessitate an inter-comparison of all the vaulting in the church, based on tests of the masonry made in the different parts.

Meanwhile we are unable to explain why the architect vaulted the larger and more complex part of the church, while giving a wooden roof to the smaller, which

[1] *Op. cit.* [2] Board, *op. cit.*

was the easiest to deal with. All the more as this was not a case of extending the choir into the transept in order to find room for the stalls of a great crowd of monks, which might have been a reason for not confining a solid roof to the chancel.

Further, it looks as if the ability displayed by the designer of the rational system of vaulting in the three-lobed part was something superior to the ordinary constructive and statical knowledge current among the German builders in the first half of the XIth century. Nor need we wonder at the application of simple barrel vaulting to a choir in the second half of the XIIth century (to which the result in question is attributed), seeing that in Great St. Martin's (Cologne), consecrated in 1172, it was used not only for the rectangular bays in a choir of the same plan as that of St. Maria, but also for the first bay of the nave, as can still be seen. In St. Martin's we cannot say whether the crossing originally had, as now, a cupola resting on triangular pendentives, for in 1373 the tower suffered from a fire in which the bells were melted, and was restored a century and a half later.[1] If it had, the system of barrel vaulting in St. Maria, flanking a cupola of exactly the same form, may have been suggested by St. Martin's.

Fig. 766.—Cologne. St. Maria im Capitol. Choir (1049 and XIIth Century).

Finally, the later strengthening of the wall piers from which spring the transverse arches of the present barrel vaulting, is a reason for suspecting that the latter is a subsequent addition, and that originally the transverse arches merely supported the wooden roof.

It is not known when the changes took place which gave the church its best architectural decoration, though some would place them at the end of the XIIth century or the beginning of the next. We will confine ourselves to noticing that the external open gallery at the summit of the eastern apse (Fig. 766), with shafts in twos and fours, presents a close analogy with the one in the three-lobed choir of Great St. Martin's, belonging to the rebuilding after the memorable fire of 1149, and that the date of St. Martin's may roughly correspond to that of St. Maria. All the more as the foliated capitals of Pointed style in the blank arcading on the apse of the latter exhibit a less advanced art than those in the same position in the Church of the Apostles at Cologne, erected after 1199.

St. Maria is the earliest instance of the aisles prolonged into the choir and enclosing it on all sides. The plan was soon after adopted in Saint Remy at Rheims (1036–1044), and rather later in Winchester Cathedral (1079–1093).

[1] Gelenius, *op. cit.*

Dehio and Von Bezold have before now instituted the proper comparisons between the church and various Roman three-lobed structures of either simple or colonnaded form. We will only repeat what we mentioned before in our accounts of the Church of the Nativity at Bethlehem (327) and of the Palatine Chapel at Aachen (796–804), that the three-lobed choir plan, derived from numerous ancient Roman examples, is of Latin origin. Before its adoption by Justinian (527–565) for the Church of the Nativity it had been used in the celebrated basilica of St. Paulinus at Nola (end of the IVth or beginning of the Vth century), the idea being taken from the small tri-apsidal basilicas (IIIrd century) in the Cemetery of Calixtus, dedicated respectively to SS. Xystus and Caecilia and to St. Soteris, the illustrious ancestress of St. Ambrose, or perhaps from the "cella trichora" of St. Symphorosa on the Via Tiburtina (IIIrd century).[1]

We will conclude our discussion of St. Maria by remarking that the three towers of the west front may later have provided a suggestion for Hezilo, bishop of Hildesheim (1054–1079), who rebuilt Alfred's cathedral (851–874). The most striking feature of his new church was the great bell-tower of three stories at the west end, flanked by two staircase turrets, between which on the ground floor was an apse facing east, opposite to the main apse which faced the west; the whole corresponding in width to the nave and aisles. The tower was demolished in the course of the last century as it threatened to fall.[2] [3]

THE CATHEDRAL OF SPEYER.—The most generally accepted date for its foundation by order of the Emperor Conrad II is 1030. By 1039 the crypt was ready, for we learn from various sources that in that year the founder was buried in it. The works went on under Henry III (1039–1056),[4] and they must have made considerable progress by 1071, for the church was dedicated to the Virgin in that year by Gundecar II, bishop of Eichstädt.[5] The notices about its completion differ, some giving the credit to Henry III or Henry IV (1056–1106),[6] [7] others to his successor Henry V (1106–1125).[8]

Damaged more than once by fire, it was largely destroyed by the French in 1689. A drawing in the possession of Herr Schwartzenberger, the author of a recent book on the cathedral, executed before the restoration began in 1756, shows that the only parts then standing were the choir, eastern transept, the nave as far as the fifth bay, and the narthex. Another view in the Museum shows that other parts were missing, viz. the upper portions of the transept with its towers, and the whole of the cupola over the narthex. The western end of the church must have been in such a ruined state that most of it had to be taken down to save it from falling: thus, for instance, only the lowest part of the towers is original, as the facing shows. From another drawing in the Museum, showing the church as it was at the beginning of the XVIIth century, we learn that the cupola of the narthex was octagonal, and that the towers had three stages, with openings of several lights as in the eastern transept. The restorations and reconstructions from 1756 to 1858 have brought the cathedral to the state in which we see it to-day.[9] [10]

[1] Stevenson, *op. cit.*
[2] *Mon. Germ. hist.—Annales Hildesheimenses.*
[3] Bertram, *Zur Kritik der ältesten Nachrichten über den Dombau zu Hildesheim.*
[4] *Mon. Germ. hist.—Wipo, Vita Chuonradi II imperatoris.*
[5] *Mon. Germ. hist.—Gundecharus, Liber pontificalis Eichstetensis.*
[6] *Mon. Germ. hist.—Annales Spirenses.*
[7] *Mon. Germ. hist.—Annales Hildesheimenses.*
[8] *Mon. Germ. hist.—Gotifredus Viterbiensis, Pantheon.*
[9] Zimmern, *Der Kaiser-dom zu Speyer.*
[10] Schwartzenberger, *Der Dom zu Speyer.*

Beneath the choir and eastern transept is the imposing crypt. The beautiful cross vaulting springs from columns bearing cubico-spherical capitals with a half-round in relief on each face (Fig. 767). Beyond it is the new Imperial sepulchral crypt, in which may be seen remains of the first Merovingian church, and the bases of two of the piers in the upper church, showing how the original form has been altered by the addition on the nave side of a half-pier with engaged column, the base of which has simple spurs at the angles.

Both arms of the transept have ribbed cross vaulting. At the north and south ends are arcades containing chapels, taken out of the thickness of the walls. Two apses project from the eastern side outside the lines of prolongation of the aisles. The western arch of the crossing is strengthened by a sub-arch, involving an addition to the piers, apparently inserted when the cupola was built. Above the crossing is an octagonal cupola carried, with its drum, on niches which form the transition from the square base to the octagon.

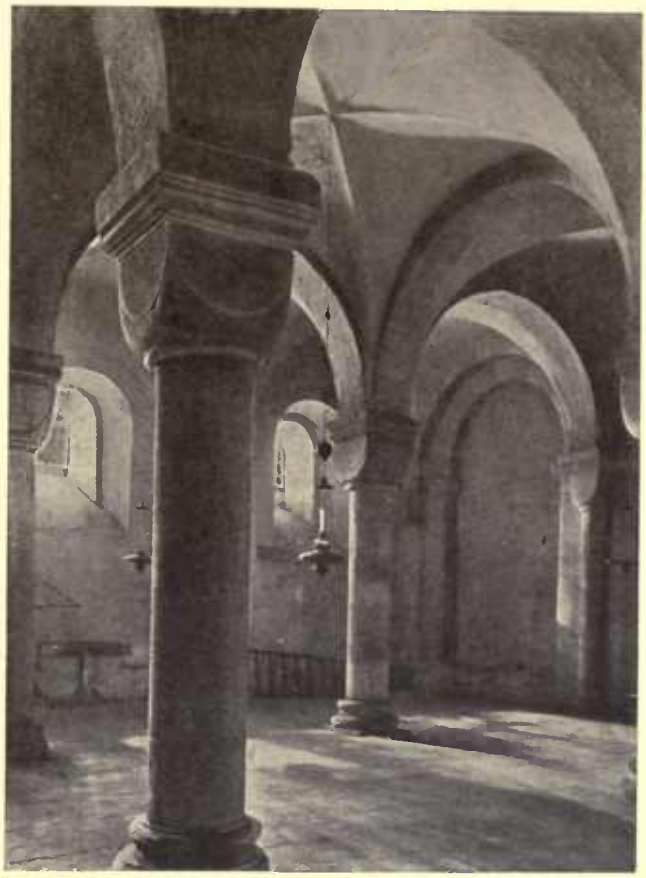


Fig. 767.—Speyer Cathedral. Crypt (XIth Century).

The body of the church (Fig. 768) is divided into nave and aisles by arches supported on piers alternately larger and smaller. Originally they were of uniform section and size: cruciform, with two engaged shafts. The alternate ones were modified when it was decided to replace the wooden roof with vaulting. The shafts of the untouched piers have cubico-spherical capitals: those on the enlarged piers (when original) are Corinthianesque with the leaves treated in a Byzantine manner, recalling those on the outer faces of the large windows.

The nave, one bay of which corresponds to two in the aisles, has raised cross vaulting, carried on wall and transverse arches. The aisles retain their original unraised cross vaults.

To pass to the exterior (Fig. 769), the apse is embellished with blank arcading. One of the shafts is carved in relief with two animals, men mounted and on foot, trees, cauliculi, and intertwined snakes; the whole very rude both in design and execution (Fig. 770). The summit is encircled by an open gallery, where the capitals reveal more advanced skill and a different artistic feeling from those in the blank arcading below. The bases here, as in all the external open galleries, are spurred.

Fig. 768.—Speyer Cathedral. Nave (XIth and XIIth Centuries).

The gallery extends along the side walls of the presbytery. The rebuilt gable at the east end contains another open gallery, stepped so as to follow the line of the roof, and also continued at the sides. In these extensions the arches are compound and not simple as in the apse and its immediate neighbourhood.

The towers flanking the presbytery have the characteristic helmed tops (a German creation), the gables being pierced with triplets enclosed by a trefoiled arch, a feature already introduced at Laach. The tops are a later addition, as is shown by the masonry.

The eastern transept has buttresses at the angles of each arm, and another in the middle of the walls. The carving round the large windows, more advanced in the south than the north arm, is superior to the relief we noticed in the apse. There is the usual open gallery under the eaves, continued along the nave and round the west front. Above it runs a cornice band of foliage and flowers, in part original.

In the north arm of the transept the western buttress contains at the top a two-light opening with a shaft supporting a lion. The capital is cubico-spherical, and the base is formed by a similar capital turned upside down. The idea of making a base out of an inverted capital is of great antiquity, as is proved by a Phoenician carving in the British

Fig. 770.—Speyer Cathedral. Carving from the exterior of the apse (XIth Century).

Museum, of which I append an illustration (Fig. 771).

Above the windows in the aisles runs a corbel course with lesenas at intervals; while the nave walls, as we have said, are crowned by the usual open gallery, with which even the octagonal cupola at the east end is provided.

In the angle between the north aisle and transept the chapel of St. Afra was erected by Henry IV between 1103 and 1106;[1] otherwise it was constructed about 1097, when Herimannus, bishop of Augsburg (1096–1133), gave the emperor a relic of St. Afra.[2] In any case it was finished

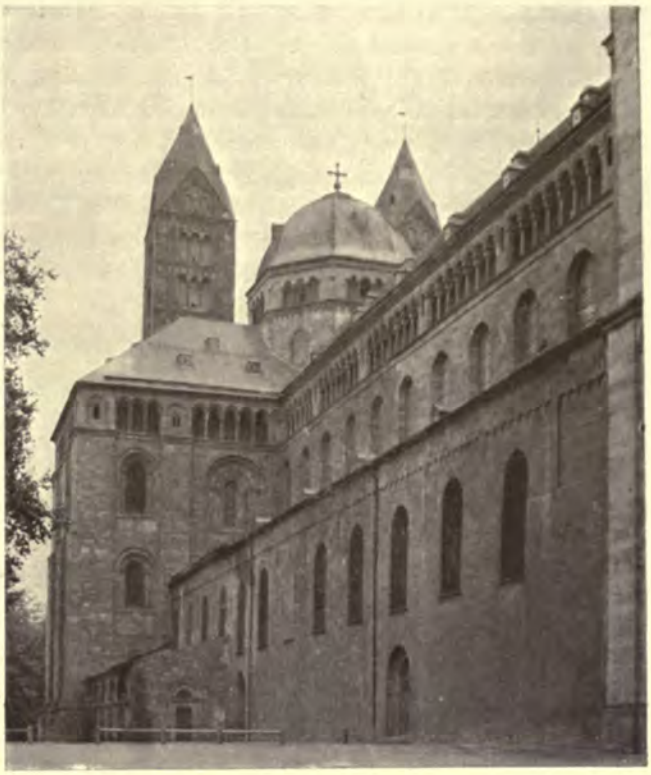


Fig. 769.—Speyer Cathedral. North side (XIth and XIIth Centuries).

Fig. 771.—British Museum. Phoenician carving.

by 1106, when the Emperor was buried in it. Opposite to it on the south side of the church is the chapel of St. Emmerammus (1088–1091). At present it is used as a baptistery (Fig. 772).

Let us now proceed to question the Sphinx of the Rhine, and compel her to reveal the main facts of her story in the XIth and XIIth centuries. The result we will subject to the tests of historical, architectural, and artistic criticism.

We have already seen that the crypt was finished in 1039, and that the cathedral was consecrated in 1071. How much of it was really complete at that moment we cannot say. But we do know that most of it had been constructed when Henry IV, learning that the stability of the structure was being endangered by its proximity to the Rhine, commissioned (1082–1084) Benno II, bishop of Osnabrück (1068–1090), to take the necessary measures, which consisted in increasing the thickness of the walls and piling up a bulwark of large blocks of stone.[3] The type of church that Benno found

[1] Schwartzenberger, *op. cit.* [2] Zimmern, *op. cit*

[3] *Mon. Germ. hist.—Norbertus, Vita Bennonis II episcopi Osnabrugensis.*

in existence is easy to realize. It was a basilica with a wooden roof over nave and transept, and vaulted aisles. The design showed an intelligent step forwards in the development of the Lombardo-Rhenish basilica, for at Limburg (1024–1045–1058) the aisles were still separated from the nave by cylindrical piers, and had wooden roofs. In short, it was a structure of the type of the almost contemporary St. Maria im Capitol at Cologne, though Speyer has the merit of more developed, *i.e.* cruciform supports in the nave, instead of the simple T form.

It is true that Schwartzenberger,[1] who in his book has invented a chronology of architecture and art, mostly of a fanciful kind, believes that the nave was vaulted as well as the aisles, on account of the form of its compound supports. All the evidence of actual buildings is against this. Thus, for instance, at San Miniato al Monte (1013), a half-column rises from the cruciform piers merely to carry a transverse arch of the nave, which, like the aisles, has a timbered roof. Again, at Mont Saint Michel (rebuilt in 1020), Cerisy la Forêt (1030–1066), Saint Étienne (1066–1086) and Saint Nicholas (1080–1093) at Caen, the compound piers give rise to a vaulting shaft, the original function of which was to carry, not the vaulting but the tie beams of the timbered roof of the nave. And, without going as far as Italy or France, the architect of the cathedral of Mainz, as rebuilt by Henry IV after the fire of 1081, carried up vaulting shafts in the nave to support a wooden ceiling.

Fig. 772.—Speyer Cathedral. Chapel of St. Emmerammus (Baptistery) (XIth Century).

Further, we saw that, in the first half of the XIth century, no basilica of large size had a complete system of cross vaulting, even in the countries which had made most progress in vault construction. And, from another point of view, it is out of the question that the builders of Speyer should have begun by providing it with vaulting (a view shared, by the way, even by Choisy[2]), and then have taken the fancy to pull this down and rebuild it either on the old lines or on a more intelligent system. Lastly, we cannot imagine an architect so incapable as to design a nave of such width with cross vaulting (which in that age was very heavy), and at the same time prepare to receive it nothing more than vaulting shafts barely 2 ft. in diameter.

[1] *Op. cit.* [2] *Histoire de l'architecture.*

Apart from the stone bulwark, Benno's work is apparent in the enormous thickness of the outer walls of the crypt, produced by the new facing. This is characterized by the different spirit in which the exterior of the sanctuary and transept is treated as compared with that of the body of the church, which has not been altered. The two parts are entirely devoid of that intimate connection which marks a building constructed all of a piece. Its absence may be noticed in the blank arcading round the apse, where the inner arches, which ought to be the most elaborate, have plain Lombardic cubico-spherical capitals (which occur in all the oldest parts of the cathedral), while the outer ones have Corinthianesque capitals, and one of them is even ornamented with carving.

It might be suggested that, in the course of the operations carried out by the bishop of Osnabrück, the cross vaulting in the crypt was reconstructed. It is a fact that this vaulting is of a distinct character, and superior to the nearly contemporary work of the kind in St. Maria im Capitol at Cologne, and still more that in St. Michael's at Hildesheim. But the men who worked at Speyer were recruited from all parts ("fabros et cementarios aliosque opifices regni sui, vel etiam de aliis regnis in opere ipso habens"),[1] and the hands of master masons from Italy, especially from the North, may explain the fine quality of the cross vaulting. However this may be, the supports are the original ones, resting on bases without angle spurs (a feature which I have not found in Germany before 1052, in the Minster of Schaffhausen), whereas this detail appears in the parts of the cathedral which have been subjected to alteration.

In the matter of vaulting, Benno added it, or intended to add it, only in the transept, as is indicated, I think, by the flat buttresses on the exterior of this part of the church. What its nature was we cannot say.

Meanwhile, the completion of the great pile progressed somewhat slowly owing to the negligence and fraud of the builders. The Emperor accordingly decided to send to Speyer (1097) Otto, afterwards bishop of Bamberg (1103–1139), who was to put a stop to this state of things and assume the supreme direction of the works. He set things in order, and on this occasion he suggested an alteration in the windows.[2][3] The results of these modifications are obvious in the transept, *e.g.* the windows with cable mouldings and spiral shafts, elaborately decorated with carving, and ill according with the bareness of the recesssed windows in the apse or the absolutely plain ones in the nave. The carvings which frame these transept windows display a higher grade of art than the capitals in the blank arcading round the exterior of the apse, and must be ascribed to some constructive and decorative enterprise of a later date than Benno. Perhaps it may be connected with the erection of the chapel of St. Afra, that is to say the period of Bishop Otto's supervision, for the carvings in either case are obviously of the same date.

The bishop of Bamberg did not confine himself to restoring order among the workmen and regularity in the works, or to providing more light for the choir: he also gave a great impetus to the completion of the church, as the following passage from his Life shows: "Non facile dici potest, quanta conservatio rerum facta sit, et quanta structurae promotio."[4] The finishing touches were given, according to Godfrey of Viterbo, in the reign of Henry V.

The notices of Herbordus and Godfrey are the latest transmitted to us by

[1] [2] *Mon. Germ. hist.—Herbordus, Dialogus de vita Ottonis episcopi Babenbergensis.*

[3] *Mon. Germ hist.—Ebo, Vita Ottonis episcopi Babenbergensis.*

[4] *Mon. Germ. hist.—Herbordus, op. cit.*

mediaeval writers concerning the building of the cathedral, which, as the original parts show, certainly does not remain in the state in which it was left by the last named Emperor. We will endeavour to supply this gap, if only in an approximate way, on the sure basis of monumental evidence.

As we said, the cathedral was originally designed to have the main spaces covered with wooden roofs. The question arises, when were these replaced by vaulting? My belief is that the change was made after the fire of 1137, which was most serious: "Ecclesia quoque Spirensis maior, cum parte non modica ciuitatis, et oppidum Goslariense, eodem die quo et Moguntia, igne consumptae sunt."[1] And it was before 1146 when St. Bernard preached the Crusade in the church. It cannot have been after the fire of 1159, for the artistic features of the old parts of the building show none of the characteristics of the third quarter of the XIIth century; for instance, spurred column bases with leaves of Pointed character, and capitals of similar character like those in the three-lobed choir of Great St. Martin at Cologne, which belongs precisely to that period.

At the time when the works of Benno and Otto were in progress at Speyer the Lombard gilds were giving the finishing touches to the constructive and statical revolution which had for its object the perfection of their vaulted basilica type, by the completion of the church at Rivolta d'Adda and the Ambrosian Basilica at Milan, achieved, the former under Urban II (1088–1099), the latter about 1098. Having accomplished this they went on to create and apply an essential feature of both the Lombardic and the Lombardo-Rhenish church; I mean the elaborate open galleries running round the exterior. Next, in the first quarter of the XIIth century, they had succeeded in covering wide spaces of great extent with the cupola of their creation, brought to perfection and in an embellished form; and this we saw in our account of the baptistery of Galliano. Outside Italy, Hezzel, the reputed architect of the great church at Cluny (1089–1130), had confined himself to covering the ground floor of each of the two octagonal towers in the main transept, which was only about 33 ft. wide, with an octagonal vault resting on hood-shaped pendentives. The Italian examples must have encouraged some able architect, called in to repair the damage suffered by the cathedral of Speyer in 1137, to suggest some safer form of roofing, and one more in keeping with the conditions of ecclesiastical architecture at the time. And it seems that this suggestion was acted upon.

While, however, the structure of the transept, after Benno's alterations, with the walls strengthened by buttresses, admitted of the erection of vaulting, that of the nave was unequal to such a burden. Recourse accordingly was had to the ingenious expedient which I will now describe. Every alternate pier was strengthened by the addition of a half vaulting pier, as may be seen in the crypt, in order to produce the Lombardic alternation of larger and smaller supports, and provide starting points for the transverse arches and cross vaulting, the latter being of the raised form in order to reduce the thrust, in the manner adopted as early as the XIth century in the aisles of San Babila at Milan, and both nave and aisles at Rivolta d'Adda and Sant' Ambrogio. The bases of these additions to the piers had rude claws instead of the leaves, sometimes of Pointed character, or animal heads to be seen in other German buildings of the second half of the XIIth century. The engaged shafts in two cases have original Corinthianesque capitals of Byzantine character, recalling the manner of some of those in the transept windows.

The cross vaulting of the nave has been dated shortly before the end of the

[1] Trithemius, *op. cit.*—*Chronica insignis monasterii Hirsaugiensis.*

XIIth century. But the form which it took in the naves of the Rhenish cathedrals at that time was very different from this, in proof of which one has only to study the nave vaulting at Worms, the old parts of which were constructed by bishop Conrad II (1171–1192), or that at Mainz (1183–1200) with its moulded ribs and pointed transverse arches. And the same was the case in other German cathedrals, *e.g.* that of Bamberg, which, after its consecration in 1012, was twice burned with its wooden roof, and rebuilt with vaulting between 1185 and 1237.

From the original smaller piers and the larger ones resulting from this alteration arches were sprung against the old walls to carry an additional facing of the upper part of the walls on the inside ; and these walls were also raised in height to enable them to resist the thrust of the vaulting. In the lunette wall spaces thus produced small windows were formed to make up for the very moderate amount of light admitted by the openings below, instead of enlarging these at the expense of the stability of the nave walls. The walls, thus heightened and increased in thickness, could now admit of the formation of the external open galleries.

At the same time, after first raising the height of the outer walls, the transept was covered with ribbed cross vaulting, supposing that the existing ribs are not a later addition to strengthen the vault. This raising in height was carried all round the top of the building and the apse ; and hence the most ornamented capitals in all the open galleries are evidently of the same date. As part of the same operations the eastern gable, with its stepped gallery, was raised, and the helmed tops of the towers, with their gables and triplet openings, erected. It was these gables that gave rise to the helmed roof, so dear to the German builders, who must certainly be credited with its invention, though, so far as I know, there is no specimen in existence older than the XIIth century. Some people, indeed, have fancied that an example belonging to the Anglo-Saxon age exists in the tower of Sompting Church (XIIth cent.), but it is not of such an early date as that, though undoubtedly an importation from abroad.

The last step was to add the octagonal cupolas over the transept and the narthex. Some writers[1] think that the former was part of the original design. I am unable to share this opinion. Given a basilica planned for wooden roofs in nave and transept, the crossing could only admit of a lantern tower roofed in the same way, just like the central towers of all the Lombardo-Norman churches which we have examined.

The ground plan of Speyer Cathedral represents the normal plan of the Lombardo-Rhenish basilica, with its eastern and western pairs of towers and octagonal cupolas over the crossings. The conception of a church confined by four towers, two at the front and two over prolongations of the aisles beyond the crossing, might have been suggested to the architect by San Lorenzo Maggiore at Milan "edita in turribus." The suggestion may also have come to him from two sources in the following way : the eastern towers from the cathedral of Ivrea (973–1001 or 1002) (unless it can be proved that they were introduced still earlier in Cologne Cathedral), or Sant' Abondio at Como (1013–1095) ; the western from St. Cyriacus at Gernrode (968).

The cupola over the centre of the narthex or western transept must have been suggested by Angilbert's church of Saint Riquier (793–798), or by Saint Remy at Rheims (VIIIth and IXth cent.), or, again, by Cologne Cathedral, supposing that Willibert's church is represented in the illumination to which we called attention, showing two towers (no doubt of wood) which must belong to the transepts. Or, lastly, the source may have been St. Michael's at Hildesheim.

[1] Lübke, *op. cit.*

THE CATHEDRAL OF TRIER.—As the old church of Agricius and Nicetius threatened to fall, it was restored by Archbishop Poppo (1015–1047), who also designed to lengthen it by a third towards the west, and took personal charge of the works. Death, however, overtook him when the walls had just risen above the ground. The new structure was continued by his successor, Eberhard (1047–1066), but how far we do not know, and finished by Udo (1066–1068–1078).[1] The excavations made by Wilmowsky[2] showed that the extension was terminated by a plain west front. From this Archbishop Bruno (1102–1124) threw out the western choir apse, and dedicated it in 1121 to the Trinity and St. Nicholas.[3]

The part of the cathedral which is of interest for our purpose is precisely this apse (Fig. 773), where the recent restoration uncovered blank arcading round the interior, while the outside is decorated with arched corbel courses broken up into sections by lesenas, but is not encircled by an open gallery. Now, given the importance of the primatial church of Gallia Belgica, and considering Bruno's acquaintance with Italy, whither he had gone in 1104 or 1106 to receive the pallium from Paschal II (1099–1118), we may safely say that the reason why the latter feature did not appear in the apse was that, although by this time diffused throughout Italy, the land of its birth, it had not yet reached Germany, where, in my belief, it was seen for the first time at Speyer, after 1137, and at Bonn in the days of Pope Innocent II (1130–1143) and the provost Gerhard von Are (1126–1169). We may, therefore, until the contrary is proved, relegate to the domain of fable the theory which would at all costs assign a Rhenish origin to this decorative motive, and give it a vogue in Northern Europe before it found its way south of the Alps.

Fig. 773.—Trier. Western apse of the Cathedral (1121).

A noteworthy apse is that of St. Castor at Coblenz in the diocese of Trier, dedicated in 1208 by Archbishop John (1190–1212) (Fig. 774).[4] Round the base is a range of blank trefoil arcading; and above this another range of arches springing from attached shafts, four of which rest on the backs of lions which the original specimens show to have been of rude design and execution. An open gallery crowns the whole, formed with isolated shafts interrupted at regular intervals by piers with attached shafts, an arrangement suggested by the alternation of single and grouped shafts in the open galleries of the apses at Cologne of about the same date.

[1] *Mon. Germ. hist.—Gesta Treverorum.*
[2] *Der Dom zu Trier.*
[3] *Mon. Germ. hist.—Gesta Treverorum.*
[4] *Mon. Germ. hist.—Notae dedicationum dioceseos Treverensis.*

I may mention here that the apse of St. Castor, which must have been rebuilt in the last years of the XIIth century, and the eastern choir apse of Worms Cathedral, furnish the prototypes in Germany of ranges of blank or open arches ornamented at the base with animal forms.

THE CATHEDRAL OF MAINZ.—The new church of St. Martin, erected by Archbishop Willigis (975–1011), was burned down on the day fixed for its consecration (1009).[1][2][3] The reconstruction was taken in hand by his successors Erkenbald (1011–1021) and Aribo (1021–1031), while Bardo (1031–1051) added the panelled ceiling ("a tecto aedificare coepit, sicque domum Dei laquearibus, pavimento, et parte fenestrarum parietibus dealbatis, dedicationis consecrationi praeparavit"), and the church was consecrated in 1036 or 1037.[4][5] That it was not complete at that date is shown by the fact that the high altar was not dedicated till 1049.[6]

Fig. 774.—Coblenz. Church of St. Castor. Apse (1208).

After another fire in 1081, the Emperor Henry IV (1056–1106) began the rebuilding, but did not live to see its completion.[7][8] We are not told how the work went on after his death, but it must have been brought to an end by Archbishop Adelbert I (1111–1137), for he is stated to have erected a magnificent wooden roof which was burned in 1137: "nec mora, civitas una cum principali templo quod ipse magnifico tecto munierat, igne cremata est."[9] Damaged again by fire in the disturbances of 1160, when Bishop Arnold (1153–1160)

[1] *Mon. Germ. hist.—Annales Wirziburgenses.*
[2] *Mon. Germ. hist.—Annales Hildesheimenses.*
[3] *Mon. Germ. hist.—Lambertus, Annales.*
[4] *Mon. Germ. hist.—Vulculdo, Vita Bardonis archiep. Moguntini.*
[5] *Mon. Germ. hist.—Marianus Scottus, Chronicon.*
[6] *Mon. Germ. hist.—Adam, Gesta Hammaburgensis Ecclesiae pontificum.*
[7] *Mon. Germ. hist.—Vita Heinrici IV imperatoris.*
[8] *Mon. Germ. hist.—Annales Ottenburani.*
[9] *Mon. Germ. hist.—Annales Palidenses.*

met a violent death,[1] it was restored in the second episcopate of Conrad (1161–1165, 1183–1200), who saw his cathedral once more burned in 1190.[2] To him are attributed, with good ground, the nave vaulting, now partly reconstructed, and the rebuilding of the eastern choir. We also know that he began a new work, thought to be the western choir, the completion of which he was prevented from seeing by death. The final touches were given by Sigfried III (1230–1249), who consecrated the cathedral in 1239[3 4] (Fig. 775).

The oldest portions of the building are the lower parts of the restored eastern towers. They have been assigned[5] to Willigis, or at latest to Bardo. The simple and rude external decoration might point to the age of the former, but the fine internal construction would lead one to ascribe it to the time of the latter.

Fig. 775.—Mainz Cathedral (XIth, XIIth, and XIIIth Centuries).

Next comes the body of the church, where the nave (Fig. 776), with the exception of the vaulting, still represents the rebuilding of Henry IV. The aisle walls were cut through in the XIIIth and XIVth centuries for openings to chapels, and there is nothing left here save two original supports with cubico-spherical capitals in the north aisle.

The width of the nave is about 50 ft. between the piers, which are of quadrangular shape and uniform size, and provided alternately with one and two half-columns. The half-columns towards the aisles correspond to similar members on the outer walls, so that we may reasonably infer that the aisles were vaulted from the beginnning (Fig. 777). The half-columns of the alternate piers on the nave side

[1 2] Jaffé, *Bibliotheca rerum Germanicarum—Monumenta Moguntina.*
[3] Joannis, *Res Moguntiacae.* [4] Schneider, *Der Dom zu Mainz.* [5] Schneider, *op. cit.*

form awkward imposts for the cross vaulting, which has moulded ribs and slightly pointed arches, and belongs to the second half of the XIIth century, or more precisely to the second episcopate of Conrad who, as we saw, restored the church. Though these half-columns do not form a structural part of the piers, and seem to be a later insertion, nevertheless the piers are all of a piece, for the material used is the same, and so is the construction. We may add that the expedient was adopted for economy in stone, a fact familiar to every one acquainted with the practical side of building. Above the impost cornice of each nave pier rises a broad pilaster supporting the arcade which carries the clerestory. The idea was originally suggested by Saint Philibert at Tournus (1008–1019).

Fig. 776.—Mainz Cathedral. Nave and eastern choir (XIth and XIIth Centuries).

It has been thought that the half-columns carried up from the alternate piers show that the nave was originally designed for vaulting, and that afterwards, when this was found to be unsuitable, it was replaced by the present vaulting; though we know for an undoubted fact that Henry IV's church had wooden roofs over the main spaces.[1] The half-columns were really carried up, either to support transverse arches, supposing that their present cubical capitals are original; or else, as I believe, to sustain the principal beams of the roof, in which case the half-columns were reduced in height when the cross vaulting was constructed in the XIIth century.

I have already pointed out in connection with Speyer what a mistake it is to suppose that a particular form of compound pier proves the existence of a system of vaulting. The nave at Mainz was so little adapted for receiving vaulting that it had to wait for the advent of a system of cross vaulting, the thrust of which was lightened so as to make up for the defective and unsuitable organic structure of the building, that is to say the system of raised cross vaulting here employed.

[1] *Mon. Germ. hist.—Annales Palidenses.*

Fig. 777.—Mainz Cathedral. South aisle (XIth and XIIth Centuries).

The cathedral of Mainz teaches a fact of primary importance for the history of German architecture, viz. that an edifice commissioned by Henry IV, the reputed Imperial patron of the Rhenish revival, was designed with a wooden ceiling for the nave. This is fatal to the theory that, in his reign, at Speyer and Mainz vaulting was erected over the main spans, only to be taken down and rebuilt at the end of the XIIth century.

An interesting feature is the Chapel of St. Godehard, to the north of the cathedral, built by Adelbert I. Its altar was consecrated in 1137 or 1138 by Burchard II (1120–1149), bishop of Worms.[1] It is derived from San Flaviano at Montefiascone (1032), and, like it, is surrounded by an aisle with a gallery over it. Both parts have ordinary continuous unraised cross vaulting (Fig. 778).

Before concluding our account of this cathedral we will call attention to a carving (Fig. 779), of the time of Conrad's second tenure of the see, from the eastern choir which he rebuilt and caused to be decorated with paintings, as a specimen of the state of carving in Germany in the second half of the XIIth century.

Fig. 779.—Mainz Cathedral. Carving in the eastern choir (XIIth Century).

THE ABBEY CHURCH OF LAACH was founded in 1093 by the Count Palatine Henry II, with the co-operation of his wife Adelaide. After his death the works were at first neglected by his step-son Sigfried, but in 1112 he started them again with a generous contribution. On his death in the next year, the Countess Hedwig devoted herself to the progress of

[1] Schneider, *op. cit.*

the building, which was finished in the time of Abbot Fulbert (1152–1178), and consecrated in 1156 by Illinus, archbishop of Trier (1152–1169), under the invocation of the Trinity, the Virgin, and St. Nicholas.[1][2][3][4]

Fig. 778.—Mainz Cathedral. Gallery of Chapel of St. Godehard (XIIth Century).

The plan is that of a basilica with nave and aisles, and a transept and choir apse at either end. The presbytery is flanked by two square towers, and the arms of the western transept are terminated by two round ones. Over the principal or eastern crossing rises an octagonal cupola, while the western one supports a large square tower (Fig. 780).

The nave is separated from the aisles by compound piers of uniform size (Fig. 781). The capitals on the shafts are either of cubico-spherical form, or Corinthianesque carved with birds, foliage, flowering plants, monsters, billets, studs, interlacing, and other ornaments. All is in moderate relief, and of indifferent design and execution ; but we must remember that the stone used is not very suitable for carving.

Fig. 780.—Laach. Abbey Church (XIth and XIIth Centuries).

The crypt has a nave and aisles separated by supports with spurred bases and capitals, either cubico-spherical, or Corinthianesque with foliage, interlacing, roses, &c. Others have already remarked[5] that the cross vaulting in the presbytery, main transept, and crypt, is more advanced than that in the nave.

[1] Browerus, *Antiquitates et annales Trevirenses.*
[2] Trithemius, *op. cit.—Chronica insignis monasterii Hirsaugiensis.*
[3] Kniel, *Die benediktiner Abtei Maria-Laach.*
[4] Bucelinus, *Germania sacra et profana.*
[5] Dehio and Von Bezold, *op. cit.*

Perhaps the church was at first designed without a crypt, and, like San Michele Maggiore at Pavia for instance, with barrel vaulting in the presbytery and eastern transept. Later, the changes were made which gave the church its present appearance.

The narthex or western transept is in two stories, and has an apse. The atrium in front of it is a subsequent addition. With the exception of the semi-domes of the two apses, unraised cross-vaulting is used in every part of the building. The exterior of the eastern apse and transept is treated with blank arcading. Throughout, except on the eastern apse, arched corbel courses occur, of larger or smaller dimensions, and either continuous or broken up by lesenas.

Fig. 781.—Laach. Abbey Church (XIth and XIIth Centuries).

It is generally thought that when the works were resumed in 1112, it was intended to vault the whole church, including the nave. The point seems to me beyond the range of doubt. What is decisive is the fact that the architect of the nave at Laach, which is only about 25 ft. wide between the bases of the piers, carried up pilasters about 4 ft. across to support the roof. Whereas the authors of the naves of Speyer and Mainz, which are about 51 ft. and 50 ft. wide respectively, contented themselves with shafts of under 2 ft. in diameter for the same purpose; and this makes clear the different conception which they had before them in the erection of their naves; for it was their intention to cover the main spaces with wooden ceilings, while the architect of Laach was all the time thinking of cross vaulting.

Nevertheless the church was not the product of a progressive study tending towards the evolution of a new architectural organism, but the result of an imitation. The absence from the eastern apse of the arcading which forms the principal decorative feature of the rest of the edifice shows (as has been apparent to other

observers besides myself) that this is the earliest part, the remainder being assignable to the resumption of the work in 1112. Now, by that year, there had come into existence another Benedictine church, with nave and aisles covered with unraised cross vaulting springing, as at Laach, from compound piers of uniform size: I mean the church of Vézelay (1096–1104) as erected by Abbot Artald. Any one can see the striking resemblance which exists between the first experiment of the School of Cluny in the way of constructing cross vaulting over a nave of large size, and the church of Laach. In spite of its German ground plan, the decoration of the latter is Lombardic; and in the disposition of the nave and aisles with their vaulting, it is a copy of the church at Vézelay.

It was just because it was the result of an imitation that Laach constituted an isolated example in the German lands at the beginning of the XIIth century. A long time will have to elapse before the German architects design a great church planned from the outset, like that of Laach, for a complete system of cross vaulting.

But apart from its being an importation and an isolated instance, the fact remains that at the time of its conception with its unraised cross vaulting, the churches of Rivolta d'Adda and Sant' Ambrogio at Milan were already in existence with their raised cross vaulting, partially ribbed as well; while San Michele Maggiore at Pavia was about to be begun, and mark the completion of the normal Lombardic basilica.

We should observe at Laach the absence of an open gallery round the apse of 1093, which is only embellished with ordinary blank arcading. We have already seen, while discussing the cathedral of Trier, that such galleries had not made their appearance in Germany in 1121.

THE MINSTER AT BONN.—The ancient collegiate church of SS. Cassius and Florentius was rebuilt by the provost Gerhard von Are (1126–1169),[1] no doubt after its property had been confirmed to it by Pope Innocent II (1130–1143).[2] It is generally believed that nothing is left of his reconstruction except the apse and its two bell-towers. The transept and the rest of the church are ascribed, by some to a rebuilding after the injuries suffered by the church during the war between Philip of Suabia (1198–1208) and Otto IV of Brunswick (1198–1212); by others to Gerhard himself who, in the course of his long tenure of the provostship, was able to give his works the stamp of the different styles which the church exhibits. One need, however, only glance at the cross vaulting of the nave at Mainz, which we know was constructed in the last years of the XIIth century, in order to feel sure that the similar vaulting of the nave at Bonn, the supports of which were evidently planned to carry it from the beginning, is not earlier than the XIIIth century.

The Minster is a basilica with nave and aisles, of Latin cross plan, with a choir apse at either end. In front of the eastern apse is a presbytery of three bays. Though there has been a good deal of alteration and reconstruction, there undoubtedly survive of Gerhard's work, in a modified condition, the eastern apse with the towers beside it, the presbytery, and the crypt beneath it. The apse is covered with a semi-dome. In the bay immediately in front of it, flanked by the towers, the vaulting has been reconstructed. The other two bays have been given a new dress in the Pointed style, but the skeleton is the original one, as the exterior shows.

[1] Maacken, *Geschichte der Pfarreien des dekanates Bonn.*

[2] *Neues Archiv der Gesellschaft für ältere deutsche Geschichtskunde*, Vol. XIII—Perlbach, *Aus einem verlorenen Codex traditionum der Bonner Münsterkirche St. Cassius und Florentius.*

The crypt (Fig. 782) under this part of the church extends to the towers, and thus has a cruciform plan. It is divided into aisles by piers and columns, some of which have cubico-spherical capitals with indentations at the angles, or are hung with plain festoons and slightly undulated below, suggesting the scalloped capital which is very rare in Germany.

I believe this crypt to be, on the whole, the work of Gerhard, but it has been altered in the part under the sanctuary, the floor of which was raised when the bodies of SS. Cassius and Florentius were exhumed, and the translation of other relics recorded under the year 1166 took place.[1]

Fig. 782.—Bonn. Crypt of Minster (XIIth Century).

The apse (Fig. 783) is decorated with arcading, and at the top is an open gallery with single shafts, between every two of which are coupled shafts. The gable above is not original. The towers, the tops of which have been altered, are covered with blank arcading, arched corbel courses, and lesenas. Here there occur capitals with crocket leaves, the earliest which I have met with in Germany.

An examination of the side walls of the presbytery shows at once that they were altered when the transept and present nave were built. Their structure is on the whole original.

The element in the Minster at Bonn which has most interest for us is the open gallery round the apse, the dated prototype (together with those in the cathedral at Speyer) of this feature for Germany, and marking the first step in the progressive history of the motive in the diocese of Cologne. The second is to be found in Great St. Martin's in the same city, believed to have been founded in the VIIIth century, destroyed by the Saxons and the Normans in turn, restored by Archbishop Bruno (953–965), and rebuilt by Archbishop Warinus (976–984).[2][3] Anno II (1056–1075) added two towers at the west end.[4] Destroyed by fire in 1049,[5] the church was rebuilt and consecrated in 1172 by Archbishop Philip von Heinsberg (1167–1191), and

[1] *Neues Archiv, loc. cit.* [2] *Mon. Germ. hist.—Catalogi archiepiscoporum Coloniensium.*
[3] *Mon. Germ. hist.—Chronicon Sancti Martini Coloniensis.*
[4] Gelenius, *op. cit.* [5] Klinckenberg, *Köln und seine Kirchen.*

finished by Abbot Simon between 1206 and 1211.[1] The marked difference of style observable in the interior of the three-lobed choir and the first barrel vaulted bay of the nave, in which all the arches are round and the original capitals have occasionally a suggestion of the Pointed style, as compared with the western part of the nave (Fig. 784) belonging to the Transitional style, with capitals of well-developed XIIIth century type, provides an excellent reason for believing that the body of the church was remodelled by Abbot Simon after the fire of 1185.[2]

The church of the time of Philip von Heinsberg must be supposed to have had barrel vaulting only in the first bay of the nave, where the two vault-shafts which carried the transverse arch may still be seen. Its object was to resist on this side the thrust of the cupola over the choir. The other bays had a wooden roof. Indeed, the piers in this part of the nave are not designed for vaulting; so that when Abbot Simon wanted to construct its cross vaults he was obliged to resort to the expedient of corbelling out high up the shafts on which they were carried.

Fig. 783.—Bonn. Eastern Choir of the Minster (XIIth Century).

I may notice in passing that the octagonal font (Fig. 785) at the west end of the north aisle, ornamented with scroll work, roses, and lions' heads, and traditionally regarded as a gift from Pope Leo III (795–816), is a work which I should describe as coming from an Italian hand, but not earlier than the XIIIth century.

The same stage in the history of the external gallery is illustrated by the three-lobed choir of the Church of the Apostles at Cologne (Fig. 786), rebuilt by Archbishop Heribert (999–1021), and finished by his successor Piligrimus (1021–1036), but reconstructed afresh by Adolphus I (1193–1205) after the fire of 1199.[3] Here, just as in Great St. Martin's, the open gallery round the apse has a series of two piers, each with two engaged shafts, alternating with a pier with four engaged shafts.

[1] Bock, *Rheinlands Baudenkmale.* [2] *Mon. Germ. hist.—Annales Floreffienses.* [3] Gelenius. *op. cit.*

Another instance at Cologne is the apse of St. Gereon, where there is said to have been a church since the IVth century.[1] The present structure is to be ascribed (1) to Archbishop Anno II (1056–1075), who threw out from the old round church a long choir flanked by towers, with a crypt below consecrated in 1068, the church being dedicated in the following year; (2) to a remodelling of this choir and its crypt in the last part of the XIIth century, completed in 1191, as we know that in 1190 the relics of the martyrs were deposited in the new crypt under the altar of St. Gereon, which altar was consecrated in 1191 by Bertoldus, bishop of Metz

Fig. 784.—Cologne. Nave of Great St. Martin's (XIIth and XIIIth Centuries).

(1180–1212). (3) Finally came the construction of the decagon forming the body of the church, which was finished in 1227.[2 3 4]

Of Anno's work there remains intact the western part of the crypt (Fig. 787), where the unraised continuous cross vaulting is carried on short columns with unspurred bases and cubico-spherical capitals. The eastern portion of the crypt, the "nova cripta" of the Annals of St. Gereon, forms part of the operations which were

[1] Gelenius, *op. cit.*
[2] *Mon. Germ. hist.—Annales Sancti Gereonis Coloniensis.*
[3] *Mon. Germ. hist.—Notae Sancti Gereonis Coloniensis.*
[4] *Mon. Germ. hist.—Vita Annonis II archiep. Coloniensis, auctore monacho Sigbergensi.*

brought to an end by the dedications of 1190 and 1191. It has raised cross vaulting with visible arches, and bases with angle spurs of either simple or elaborate character. To the same date belongs the apse encircled by its open gallery (Fig. 788). The apse is clumsily connected with the lower part of Anno's towers; and though here we find three light supports alternating with one heavy one, the gallery is closely related to those of St. Martin's and the Apostles.

Fig. 786.—Cologne. Church of the Apostles (XIIIth Century).

It ought to be mentioned that the arrangement of light and heavy supports in the apse galleries at Cologne is derived from the arcaded galleries interrupted by piers on the exterior of the Duomo at Modena (1099–1106) and the apse of San Pietro in Ciel d'Oro at Pavia (1132), where, however, the galleries are not continuous.

THE CATHEDRAL OF WORMS was in existence as early as the reign of Dagobert, and was struck by lightning and burned in 872. The subsequent mis-

Fig. 785.—Cologne. Font in Great St. Martin's (about XIIIth Century).

fortunes of the city retarded and impeded the efforts of various bishops to rebuild the church, until Burchard I (1000–1025) demolished what had been erected by his predecessors as being unsuitable and mean, and began the construction of a new cathedral in 1008. The unfinished structure, which was nearly ready for its roof ("iam pene ad culmen eductum stabat"), was dedicated in the presence of the Emperor Henry II in 1016.

The western part of Burchard's church fell in 1018, a fact not difficult to understand when we remember that it had been built so hastily that the bishop's biographer thought it rose as if by magic. By 1020 this portion was rebuilt on solid foundations, and beneath it a crypt was formed, in which the founder was buried.

In 1033 Bishop Azzecho (1025–1044) erected the chapel of St. Maurice as an adjunct to the church. Bishop Eppo expended large sums in completing the unfinished works, and at last the consecration took place (1110) in the presence of the Emperor Henry V. Trithemius gives the date as 1118.

Bishop Conrad II (1171–1192) repaired the building which showed signs of falling, and a fresh consecration took place in the presence of the Emperor Frederick I in 1181. In the XVth century the north-west tower fell and was rebuilt, and in 1689 the cathedral was burned by the French.[1] [2] [3] [4]

Such, in brief, is the story of the vicissitudes through which

Fig. 787.—Cologne. Church of St. Gereon. Western part of the Crypt (XIth Century).

[1] Schannat, *Historia episcopatus Wormatiensis.*

[2] MS. Chronicle of the monastery of Kirschgarten in the Archives of the City of Worms.

[3] Trithemius, *op. cit.*—*Chronica insignis monasterii Hirsaugiensis.*

[4] *Mon. Germ. hist.*—*Vita Burchardi episcopi.*

the cathedral has passed. Some[1] have thought that our church of SS. Peter and Paul is still, on the whole, the one begun by Burchard I (the western towers being his), continued through the XIth century, and consecrated in 1110. Others are of opinion that the body of the church, with the exception of the nave vaulting, which they think was subsequently reconstructed, belongs to Burchard ; the eastern choir apse, with the transept and cupola, to Eppo ; and the western choir to a rebuilding in the early years of the XIIIth century.

Fig. 788.—Cologne. St. Gereon. East end (XIth and XIIth Centuries).

Each of these views when analyzed falls to pieces. The nearest to the truth are Dehio and Von Bezold,[2] who argue that Conrad II rebuilt the church with the exception of two towers, and that the western choir was rebuilt on Burchard's foundations in the XIIIth century. My belief is that, with the exception of the western choir, which belongs to the early XIIIth century, the previous one being apsidal, the cross vaulting of the nave, different in type and execution from that in the presbytery, aisles, and transept, and perhaps the interior of the eastern apse, the church as we now see it is due to Conrad II (1171–1192). His work must have consisted, not in mere restoration of a ruinous building ("basilicam principem ruinas hinc inde minitantem maximis sumptibus in priorem statum reduxit"[3]), but in its reconstruction.

An experienced eye will readily see the constructive and decorative unity of the church, always excepting the western portion, which, apart from the towers, one of which has been rebuilt, is later than the works of Conrad. Thus, arched corbel courses (each arch being recessed), some continuous, some broken by embellished lesenas or buttresses, occur on every part of the exterior. Everywhere the openings

[1] Lübke, *op. cit.* [2] *Op. cit.* [3] Schannat, *op. cit.*

are in groups, and the stringcourses are generally of saw-tooth design. Everything points to its being a structure of one date, including the Lombardic cupola over the crossing with its different masonry.

The eastern cylindrical towers cannot be assigned to Burchard's period, at any rate so far as regards the stages of the old part (with their arched corbel courses broken by lesenas, and saw-tooth mouldings) which rise above the lofty basements of the towers. The early XIth century is not the period which suits the recessed arches of the corbel courses, separated by lesenas which are no longer plain but moulded, and in some cases supported by human heads, occasionally of fantastic character. In fact, one might search in vain for such arched courses with figure corbels on any Western building of known date belonging to the early years of the XIth century.

Fig. 789.—Worms Cathedral. Nave looking east (XIIth Century).

Further, these towers are clearly contemporary with the choir which they flank, as is shown not only by the masonry, consisting at the base of roughly dressed stones, with higher up a facing of carefully dressed blocks of varying dimensions, but also by its decorative treatment, and, thirdly, by the carvings of living creatures, seeing that, on more than one ground, we may regard as contemporary the carved heads on the towers, the figures in the windows, those which project below the open gallery round the apse, and the carving on one of its shafts of a man with an animal gnawing at his head.

The polygonal exterior of the choir may be regarded as a casing over of the old semicircular apse inside belonging to the church of the XIth century. Now, for the reasons given in our discussion of Speyer and Trier, the gallery round the choir, and also that round the cupola over the crossing, cannot be earlier than the XIIth century. Moreover, the Lombardic portal on the north side, with its foliage occasionally

suggesting the Pointed style, and its figures sculpture, indicate a date not earlier than that century. The same may be said of the canopy which formerly surmounted it; for Lombardic portals or porches with a canopy, or niche, or arcade above them are not earlier than the erection of the cathedral of Modena (1099–1106). In any case the Lombardic portal did not appear in its developed form and elaborate dress before the XIIth century, as we made clear in our account of Saint Guilhem du Désert.

To turn now to the interior (Fig. 789), the Lombardic arrangement of piers alternating with piers having engaged shafts suggests a date which is not that of Burchard I. It is inconceivable that such an important step towards the completion of the Lombardo-Rhenish basilica should have been taken at Worms between 1008 and 1016, and that afterwards, in 1030, a retrograde one should have been made at Speyer when Conrad II built St. Mary's to serve as the Imperial tomb house, and another again at Mainz in 1081 when Henry IV's cathedral was erected.

But there are other reasons for excluding the age of Burchard. There are the spurred bases of the half-columns, whereas these adjuncts do not appear in St. Michael's Hildesheim, which was built in his lifetime, or in the later St. Maria im Capitol at Cologne, or in Speyer Cathedral. There are the ram's heads at the angles of some of the bases in the transept, indicating a stage of art which cannot be paralleled in any Western monument of the early XIth century. There are the vaulting shafts, some 4 ft. in breadth, arranged to receive the cross vaulting of the nave; whereas we know that in the naves of German cathedrals of the XIth century only single shafts were carried up to support the wooden roofs. Speyer and Mainz are examples. Then there are the well-known and original carvings on the wall piers in the presbytery, one of which, signed by Otto, represents a woman holding the Devil by his horns while an angel pierces him with a lance, and another has projecting heads and scroll work (Fig. 790). No one could possibly ascribe such work to German artists of the early XIth century, seeing that at the end of the XIIth they had only attained to the sort of carving found in the eastern choir of Mainz. And, lastly, there is the cupola over the crossing, carried on hood-shaped pendentives, first used for such a purpose north of the Alps in Hugo's church at Cluny (1089–1130) and Saint Étienne at Nevers (1097).

Fig. 790.—Worms. Carving in the Cathedral (XIIth Century).

* * *

The slow evolution of the Lombardo-Rhenish basilica as compared with the Lombardic was not an isolated and merely local phenomenon, but was common to all the contemporary German Schools, and to those of the neighbouring German parts of Switzerland. We may set out the evidence in the form of a review of some of the best known and dated churches of the period in these countries.

THE ABBEY CHURCH OF HERSFELD was rebuilt after the fire of 1038 by Poppo von Stablo, and the crypt was dedicated in 1040.[1] It was not finished till 1144.[2] The plan was that of a Latin cross, the nave and aisles being separated by columns with cubico-spherical capitals, and Attic, unspurred bases. It had wooden roofs.

THE MINSTER OF SCHAFFHAUSEN was founded by Count Eberhard and his wife Ida. The choir must have been ready by 1052, for in that year Pope Leo IX consecrated the principal altar. The church was dedicated by Rumoldus, bishop of Constanz, in 1064. It was erected from the plans, and with the advice of the priest Liutbald: "prefiguratione atque adiutorio cuiusdam Liutbaldi."[3][4]

Fig. 791.—Cologne. St. Ursula. Nave looking west (XIth Century).

It is of cruciform plan, with nave and aisles separated by columns, and a rectangular chancel. The aisles are prolonged beyond the transept in the Lombardo-Norman fashion. The columns have cubico-spherical capitals and spurred bases. With the exception of the semi-domes of the two small apses in the transept, the whole of the church is roofed with timber.

This appears to be the earliest church of Germany or German Switzerland with spurred bases for its supports. In those countries the spurs had from the beginning the form of rudimentary claws, or of leaves. It was only in the XIIth century, after the Lombardic School had produced forms so advanced as to be almost anticipations of those of the Pointed style, *e.g.* in San Michele Maggiore at Pavia, that the German chisels began to elaborate them with heads, paws of animals, leaves, sometimes curling over as on the original bases in the transept of the abbey church of Schwarzach (XIIth or XIIIth century),[5] and other ornamental forms.

[1] *Mon. Germ. hist.—Lambertus, Annales.* [2] Lübke, *op. cit.*
[3] *Mon. Germ. hist.—Annales Scafhusenses.* [4] *Mon. Germ. hist.—Notae S. Salvatoris Scafhusensis.*
[5] *Sonder-abdruck aus dem Freiburger Diöcesan-Archiv.*—Sauer, *Die Abteikirche in Schwarzach.*

If we were to accept the dates fixed by some writers for St. Ursula at Cologne (Fig. 791), according to whom the oldest parts of the church go back to the rebuilding by Archbishop Heribert (999–1020) and Richeza, Queen of Poland († 1063), and its completion by Anno II (1059–1075) who, we are told, used to spend much time in prayer before the relics of the Virgins,[1] in that case the half-columns in the aisles would have been provided with their spurred bases in the early years of the XIth century. But the existence in these aisles of cubico-spherical capitals, some ornamented with foliage or other forms, and also of spurred bases, whereas in St. Maria im Capitol and Anno II's crypt at St. Gereon the capitals of this type are left plain, and the bases are devoid of any ornament at the angles, affords good ground for suspecting that the nave and transept of St. Ursula have absolutely no connection with Heribert; and that though Queen Richeza may really have laid the foundations of a new church, she never saw it rise above the ground. This suspicion is confirmed by the abundant and varied architectural decoration of the exterior of the nave and transept, which can still be seen on the north side. It consists of arched corbel courses, either continuous or broken by lesenas at various intervals, and blank arcading. Whereas the exterior of St. Maria im Capitol has nothing more than a range of blank arches in the aisles, and the original external face of the presbytery in St. Gereon, one of Anno's works, has only two tiers of blank arcading.

Accordingly, I feel that all that is visible of the nave and transept of St. Ursula, built as they were for wooden roofs though the aisles have unraised cross vaulting, must be assigned to a date not earlier than the last years of Anno, and when the choir of St. Gereon was already in existence (1069).

THE CATHEDRAL OF CONSTANZ.—The old church having fallen in 1052, Bishop Rumoldus (1051–1069) undertook its re-erection, according to Kraus[2] in 1054, and was buried in it. The consecration took place in 1089 under Bishop Gebhard III (1084–1110).[3]

The original form was that of a basilica with arcades and a wooden roof. The substantial columns rest on Attic bases with rude leaf spurs. They are surmounted by characteristic capitals, neither cubico-spherical nor scalloped, but spherico-polygonal, crowned by an octagonal abacus (Fig. 792).

Fig. 792.—Constanz. Capital in the Cathedral (XIth Century).

THE CATHEDRAL OF HILDESHEIM.—The original church, built by Bishop Alfred (851–874) and consecrated in 872, was burned down (1046) in the time of Bishop Azelinus (1044–1054), who in 1047 began the re-erection which he did not live to see finished. His successor, Hezilo (1054–1079), continued the work, and the consecration was performed in 1061. Bishop Bertholdus I (1119–1130) finished or added the apse.[4 5 6 7]

Hezilo's basilica, of Latin cross form, was designed, like St. Michael's, for a

[1] Gelenius, *op. cit.*
[2 3] *Die Kunstdenkmäler des Grossherzogthums Baden—Die Kunstdenkmäler des kreises Konstanz.*
[4] Bertram, *Geschichte des Bisthums Hildesheim.*
[5] Id., *Zur Kritik der ältesten Nachrichten über den Dombau zu Hildesheim.*
[6] *Mon. Germ. hist.—Annales Hildesheimenses.* [7] *Mon. Germ. hist.—Chronicon Hildesheimense.*

wooden roof, and had its nave separated from the aisles by columns, between every two of which came a quadrangular pier. Modern stucco capitals conceal the old ones. The bases are Attic, and without spurs.

Hezilo erected another cruciform church in honour of St. Maurice, replacing an older one of Bishop Godehard's (1022–1038), viz. the church of Moritzberg near Hildesheim. It had a wooden roof. Here again, the capitals of the columns are concealed by stucco. The bases rest on plinths rounded off at the angles for convenience. The water-leaf capitals in the crypt, being of the type in vogue at Hildesheim in Hezilo's

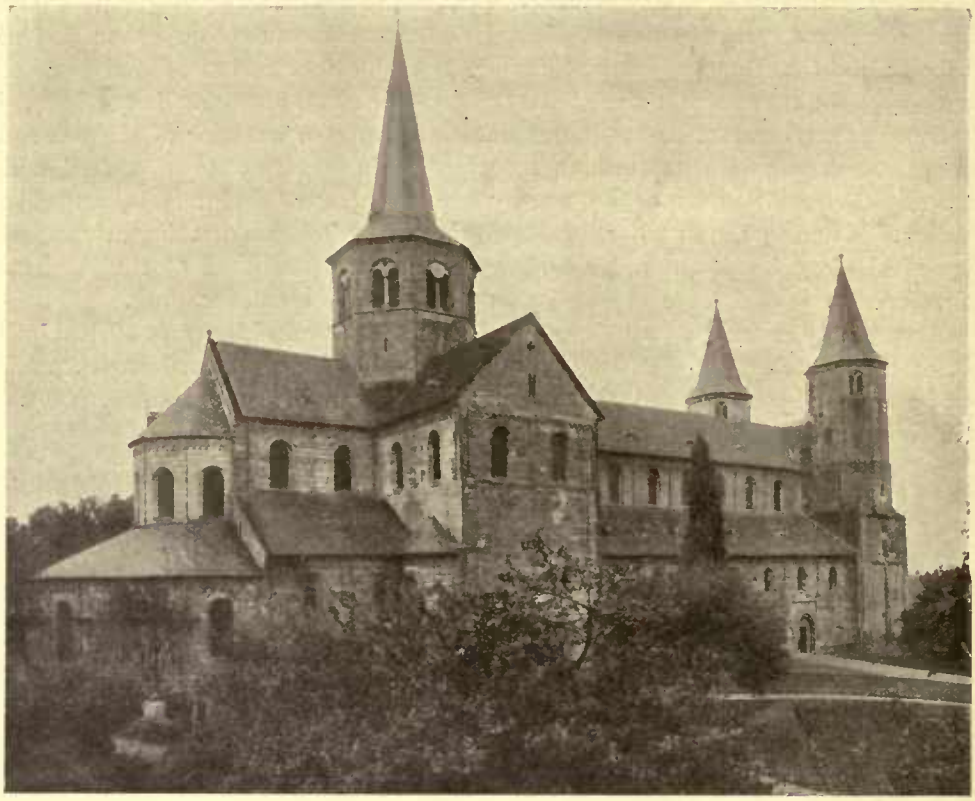


Fig. 793.—Hildesheim. Church of St. Godehard (XIIth Century).

days, suggest that the now concealed original capitals in the upper church, as well as those in the nave of the cathedral, are of the same pattern.

He also built the church of the Holy Cross at Hildesheim. It has a triforium, and quadrangular piers in the nave. The main portions have wooden ceilings, but the aisles are covered by rough barrel vaulting. The latter is to be explained by the existence of the triforium; otherwise the wooden ceilings would have been extended to the aisles. Indeed, well on in the XIIth century at Hildesheim, both nave and aisles in the church of St. Godehard were provided with ceilings (Figs. 793, 794).

St. Godehard's is a church of considerable interest. Bernward I (1130–1153) laid the first stone in 1133; while Adelogus (1171–1190) carried up the towers at the west end, where he consecrated a chapel of St. Mary Magdalen, built the western apse, and finally consecrated the church afresh in 1172.

In the nave there is again the arrangement of two columns alternating with a

quadrangular pier. The angles of the column bases have the upturned claws (also in Adelogus's work in St. Michael's), characteristic of the Hildesheim School of the XIIth century. Earlier it did not make use of this feature, as may be seen from the old bases in St. Michael's, as well as those in the Cathedral and at Moritzberg. In one case four animal paws are introduced. The capitals (Fig. 795) are of cubico-spherical form, richly decorated with foliage, cauliculi, scroll work, flowers, discs, real or fanciful creatures, and scenes from sacred history. They are characterized by the same artistic quality as that of the capitals in St. Michael's, executed for Adelogus

Fig. 794.—Hildesheim. Nave of the Church of St. Godehard (XIIth Century).

before 1186, and suggest that his munificence was not confined to the cases mentioned by the chroniclers.

THE ABBEY CHURCH OF ST. AURELIUS, HIRSAU, was begun in 830 by Count Erlefried and his son Notingus, bishop of Vercelli (827–830), and completed in 837. As it gave signs of weakness, its reconstruction was begun by Count Adelbert and his wife Wiltrudis in 1059, and in 1071 the dedication took place.[1] [2] It consisted of a nave and aisles (Fig. 796) separated by short columns (monoliths of local stone), two western towers with a narthex between them, and aisles prolonged beyond the transept, as in a Lombardo-Norman basilica. To each of the isolated columns corre-

[1] Trithemius, *op. cit.*—*Chronica insignis monasterii Hirsaugiensis.*
[2] *Mon. Germ. hist.*—*Historia monasterii Hirsaugiensis.*

sponds a wall shaft standing on a continuous plinth. The capitals are of cubico-spherical form. There is cross vaulting in the narthex, but the nave had a wooden ceiling, though the aisles had unraised cross vaulting.

Fig. 795.—Hildesheim. Church of St. Godehard. Capitals (XIIth Century).

Before leaving Hirsau let us cross the stream which flows near the church, and climb the hill opposite to get a view of the tower (Fig. 797) which is all that is left of the church of the great monastery of St. Peter, begun by William, abbot of Hirsau, in 1082, and finished in 1091 by the unaided hands, it is said, of the monks and lay brothers.[1] [2]

This tower is regarded, and rightly, as of the XIIth century;[3] that is to say, after the monks had recovered from the losses inflicted on them by Henry IV for having taken the side of Gregory VII, and when they were in a condition to finish the works of St. Peter's, which cannot have been entirely complete in 1091.

Fig. 796.—Hirsau. Abbey Church of St. Aurelius (1059–1071).

An interesting feature of the tower is the band of carving round the base of the third stage. It contains atlantes supporting lesenas (Fig. 798), and beside them animals, a human being, and the wheel of Fortune. In spite of their rudeness, these reliefs betray a more skilful hand than that which produced the carving we noticed on the exterior of the apse at Speyer, and clearly reveal Lombardic influence. They form a piece of demonstrative evidence that the well-known reliefs with the Legend of St. Vincent, and the arcaded altar front with pairs of Apostles in each arch, built into a wall in Basel Cathedral, are not, as has been thought, coeval with its erection

[1] Trithemius, *op. cit.*—*Chronica insignis monasterii Hirsaugiensis.*
[2] *Mon. Germ. hist.*—*Historia monasterii Hirsaugiensis.*
[3] Lübke, *op. cit.*

Fig. 797.—Hirsau. Tower of the Abbey Church of St. Peter (XIIth Century).

(1014–1019)[1 2] under Bishop Adalbert II (999–1021), but must be dated not earlier than the end of the XIIth century. And the date will be the same, even if they are regarded as works of Italian or French origin.

THE CHURCH OF ST. JAMES AT BAMBERG was begun under Bishop Hermann I (1065–1075), and the crypt was consecrated in 1072. The dedication of the church took place in 1109.[3 4]

It is of cruciform plan with a choir apse at either end (the eastern one having been rebuilt in the Pointed style) and wooden ceilings. The nave (Fig. 799) is separated from the aisles by columns with cubico-spherical capitals and Attic unspurred bases.

The much altered church of St. Gangolph in the same town, erected by Bishop Günther (1057–1065),[5 6] which now has clumsy vaulting, also originally had a wooden ceiling.

THE CHURCH OF ST. JUSTINUS AT HÖCHST ON THE MAIN.—As the old church was in a dangerous condition it was demolished and rebuilt in 1090 by Adelmann, abbot of the monastery of St. Albanus, in the days of Ruthardus, archbishop of Mainz (1088–1109).[7]

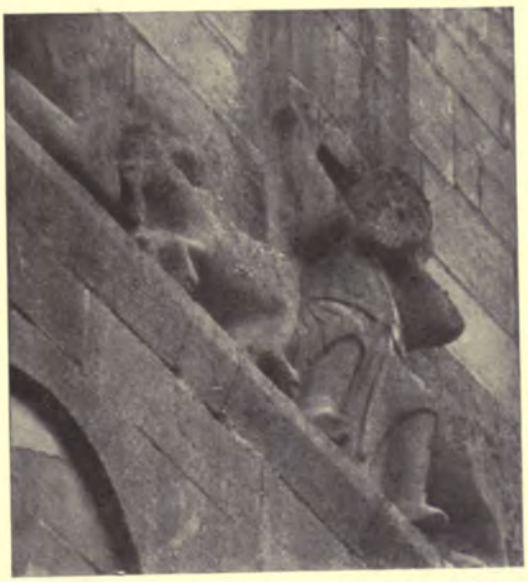


Fig. 798.—Hirsau. Carving on tower of the Abbey Church of St. Peter (XIIth Century).

[1] Robert, *Gallia Christiana.*

[2] Gams, *op. cit.*

[3] *Mon. Germ. hist.—Notae Sancti Jacobi Babenbergensis.*

[4 5] Jaffé, *Bibliotheca rerum Germanicarum—Monumenta Bambergensia.*

[6] *Mon. Germ. hist.—Adalbertus, Vita et miracula Henrici II imperatoris.*

[7] Joannis, *op. cit.*

The church is of cruciform plan, with wooden ceilings (Fig. 800). An interesting feature are the Corinthianesque capitals, surmounted by Ravennate pulvins of inverted truncated pyramid form. This is the earliest instance of the occurrence of such pulvins in any German building.

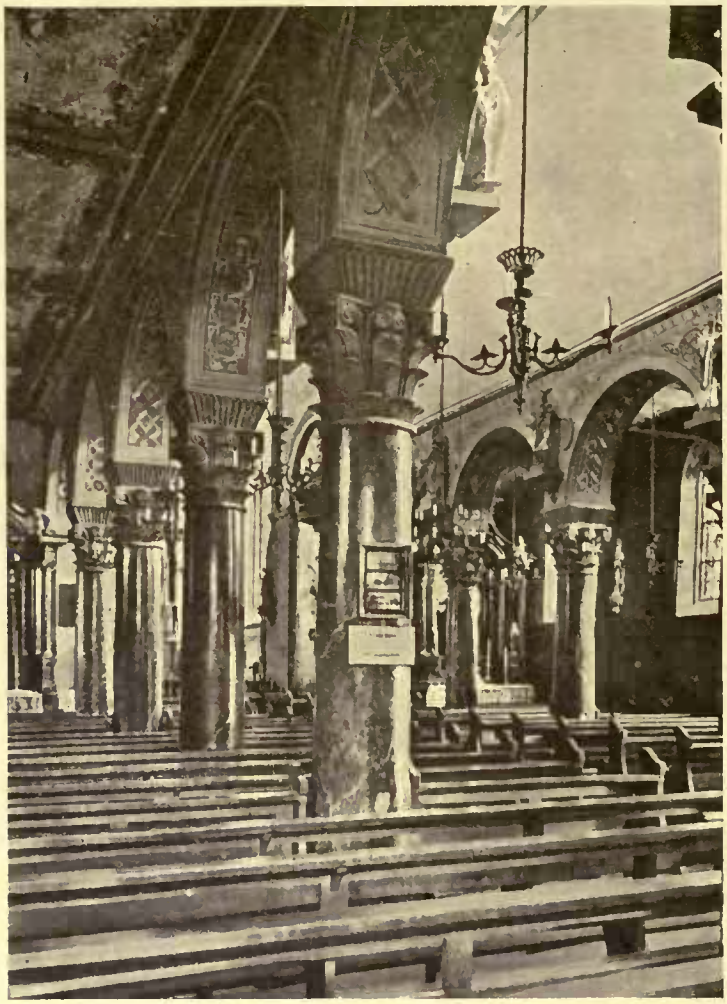


Fig. 800.—Höchst am Main. Church of St. Justinus (1090).

THE CHURCH OF ALPIRSBACH, erected in 1095, is of Latin cross plan, with the nave and aisles separated by columns with cubico-spherical capitals. It has a wooden roof.

THE ABBEY CHURCH OF PAULINZELLE.—We learn that it was founded in the time of the Emperor Henry IV by St. Paulina († 1107), who was buried there before the altar of the Holy Cross,[1] and completed in 1119. A fire in the XVIIth century, and the abandonment of the church, have reduced it to the ruined state which it now presents. The nave and aisles were roofed with wood. The columns dividing them have cubico-spherical capitals with pairs of semicircles on the faces, and spurred bases.

THE LIEBFRAUENKIRCHE AT HALBERSTADT, begun by Bishop Arnulfus (996–1023), and consecrated in 1005, was still in course of construction in 1020. Bishop Dietmarus (1089) bequeathed all his property for the completion of the church. Bishop Rudolfus (1136–1149) rebuilt it, and performed the consecration in 1145.

It is of cruciform plan, with a very short transept. Square piers separate the nave from the aisles; and, with the exception of the apse, the whole church was designed for wooden ceilings. The cross vaulting in the transept and presbytery was constructed after the damage suffered at the time of the destruction of the town by

[1] Trithemius, *op. cit.*—*Chronica insignis monasterii Hirsaugiensis.*

Henry the Lion in 1179.[1] Of its four towers, the western pair, embellished with arched corbel courses, have German helmed tops.

* * *

I conclude with the expression of a wish that the new and wide field which I have opened up in the domain of Monumental Archaeology may find a worker with the will and the ability to cultivate it so that it may produce more fruit. Such an enterprise would be worthy both of the cause of knowledge and of the investigator; because the greatest of all the arts—Architecture—is the one which, by its creations, preserves in the most tangible form the memory of great nations all through the ages.

[1] Lucanus, *Die Liebfrauenkirche zu Halberstadt.*

Fig. 799.—Bamberg. Church of St. James (XIth and XIIth Centuries).

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